AUTHOR INDEX

A

Aaronson, S., 19
Abbott, P. M., 102
Abe, C., 416
Abel, P., 369, 370, 399
Aboud, M., 148, 171
Abou El-Wafa, M., 262
Abou-Gareeb, A. H., 262
Abraham, R. J., 270, 271
Ackermann, W. W., 364
Ackrell, B. A. C., 500
Ada, G. L., 292
Adair, F. W., 495, 496, 497, 510
Adams, A. M., 349
Adams, I., 73, 77, 78
Adelberg, E. A., 136, 138, 145, 150, 174
Adler, F. L., 290
Adler, J., 462
Adolph, E., 533
Aebi, H. E., 297
Agabal'iants, G. G., 334
Ahl, R., 220, 224, 228
Ahmad, S., 262
Ahmadjian, V., 64
Ahmad-Zadeh, C., 401
Ahmed, A., 257, 263, 264
Ahmed, S., 263
Ahrens, J., 501
Akagi, J. M., 184, 503
Akiba, T., 132, 133, 147, 148
Aksenova, N. N., 291
Akunuki, K., 502
Aladjem, F., 293, 294
Alas, G., 329, 333
Albrecht, A. M., 116
Albury, N. N., 341
Aldefi, R. A., 184
Aleem, M. I. H., 193, 194, 491, 492, 493, 494, 495, 496, 498, 499, 504, 506, 507, 508, 509, 510, 512, 513, 514
Alexander, M., 89, 96, 97, 98, 101, 493
Alexander, P., 291
Alexopoulos, C. J., 91
Alfred, L. J., 413
Algranati, I. D., 104, 308
Al-Hafidh, M., 52
Allen, M. B., 50, 58, 76
Allison, A. C., 2, 416
Allison, F. E., 54
Allison, R. K., 55
Almeida, J., 284
Almeida, J. D., 230, 237
Aloni, Y., 430, 431
Altstein, A. D., 400, 415, 445
Alvero, M. G., 262
Amador, E. J., 278, 279
Amako, K., 432
Amati, P., 455, 456
Ambler, R. P., 187
Ambrose, E. J., 411
Amerine, M. A., 323-58; 323, 334, 336, 342, 343, 345, 347, 348
Amesz, J., 49
Ammann, J., 309, 312, 317
Amraut, A. A., 290
Amrein, Y. U., 113
Anderer, F. A., 393, 412, 438
Anderson, E., 123
Anderson, E. S., 131-80; 133, 134, 135, 136, 137, 138, 139, 141, 142, 143, 144, 146, 147, 148, 150, 151, 152, 153, 155, 156, 157, 158, 159, 160, 161, 162, 166, 167, 168, 169, 170, 171, 172, 174, 175, 176
Anderson, F., 307
Anderson, J. H., 494
Anderson, T. F., 153
André, L., 328
Angermann, J., 432
Anken, M., 402, 403, 405, 418, 419, 434, 435, 437
Antia, N. J., 52
Antonini, E., 296
Aoyama, Y., 366, 367
Apgar, J., 306
Apostica, E., 159, 160
Appella, E., 286, 293
Appleby, C. A., 188, 189, 190
Applegarth, D. A., 96
Appleman, M. D., 493
Appleyard, G., 361, 362, 364, 366, 377, 381, 384
Aragon, P. R., 260
Arai, H., 156
Arai, T., 133, 153
Arber, W., 156, 174, 461
Archer, T. E., 334
Archetti, I., 444
Arhelger, R. B., 367
Arima, K., 89, 183, 193, 194
Aris, R., 527, 534
Arlinghaus, R. B., 224, 226, 227, 229, 231, 233, 234, 236
Armstrong, J. A., 444
Arnheim, N., Jr., 296
Arnon, D. I., 49, 50, 58, 64, 502, 513
Arnon, R., 284, 299
Aronson, J. M., 88, 89, 90, 93, 94, 95, 96, 101
Arquilla, E. R., 293
Arroyo Varela, V., 329, 333
Asano, A., 193, 502
Asato, R. N., 500
Asensio, C., 89
Ashcroft, M. T., 120, 121
Askonas, B. A., 290, 300
Asso, J., 213, 214, 218, 220, 222, 228
Aston, P. R., 194
Ásvány, Á., 324, 338
Atchison, R. W., 444
Atkinson, D. E., 500, 501
Attardi, G., 292
Atthasampunna, P., 250, 251, 264
Aubert, J. P., 505, 512
Aubert, S., 496, 497, 511
Auerbach, R. C., 349
August, J. T., 316, 317
Ault, W. V., 511
Aurbach, G. D., 414
Aurelian, L., 444
Austin, C. M., 292
Austin, J. B., 397, 398, 401, 416, 417, 444
Auzzins, I., 300
Avakyan, A. A., 367, 383
Averbukh, B. Ia., 334
Axelrod, D., 394, 417
Aynaud, J. M., 218, 220, 222
Azoulay, E., 194, 195

B

Babcock, V. I., 433, 438
Bablanian, R., 366
Bach, M. K., 385
Bachle, Y. S., 385
Bachrach, H. L., 201-44; 205, 208, 211, 215, 216, 217, 218, 219, 221, 222, 223, 224, 225, 226, 227,

228, 229, 230, 231, 232, 234, 235, 236
Bagini, C., 210
Bahal, M. R., 40
Bailey, R. B., 433, 438
Baker, H., 116
Baker, J. R., 123, 125
Balandin, I. G., 385
Balduzzi, P., 400
Baldwin, D. E., 206
Baltimore, D., 307, 309, 312, 315
Bamburg, J. R., 277
Banbury, G. H., 103
Bandurski, R. S., 495
Banerjee, A. K., 316, 317
Banfield, W. G., 364
Baram, P., 291
Barber, G. A., 103
Barber, M., 132
Barber, R., 314
Barei, S., 210, 211, 217
Barlow, G. H., 306
Barnes, B., 77
Barnes, J. M., 280
Baron, L. S., 126, 145, 174
Baron, S., 220, 402, 403, 406, 407
Barret, A., 328
Barrett, J., 182, 193, 194, 195, 527
Barrow, J. H., 123, 125
Barshad, I., 90, 94
Bartha, R., 501
Bartnicki-Garcia, S., 87-108; 88, 89, 92, 93, 94, 95, 96, 99, 100, 101, 102, 103, 104
Bartsch, R. G., 181-200; 183, 184, 185, 186, 187
Barui, R. A., 263
Basilico, C., 368, 383, 385, 404, 406, 407, 408, 437, 440, 441
Bassel, B. A., 306
Bassett, E. W., 285
Bassham, J. A., 49, 50
Bastos, A. L., 367
Basu Mallik, K. C., 256
Baudens, J. G., 147
Bauer, D. J., 385
Bauer, K., 217, 218, 219
Bauer, W., 126
Baum, S. G., 398, 443
Baumgärtel, O., 29
Bautz, E. F., 479
Bautz, F. A., 479
Baxby, D., 384
Bayne-Jones, S., 533
Bé, A. W. H., 72, 75, 78, 79
Bearden, A. J., 186
Beattie, J. M., 59
Beaty, L. E., 437
Beaudreau, G., 316
Becher, R., 492
Beck, J. V., 194, 498, 499, 507, 513
Becker, B., 92
Becker, Y., 309, 362, 363, 367, 374, 379, 380, 382, 383, 384, 432, 439
Beckwith, J. R., 461, 462, 467, 468
Bednar, T. W., 64
Bedson, H. S., 366, 368, 369
Beech, F. W., 323
Beinert, H., 185, 495
Beisel, W. R., 246
Beiser, S. M., 285
Bell, R., 493
Bell, T. A., 349
Bellman, R., 540
Bello, L. J., 429, 431, 440
Belova, S., 415
Benda, I., 331, 332, 339
Bendet, I. J., 38, 39
Bendich, A., 411
Bendix, S., 61
Benecerraf, B., 283, 290, 291, 292, 293, 299, 300
Ben-Efraim, S., 299
Benenson, A. S., 257, 263, 264
Bengtsson, S., 219, 222
Ben-Gurion, R., 465
Benjamin, E., 11
Benjamin, T. L., 394, 417, 430, 431
Bennett, J. C., 284, 285, 289
Ben-Porat, T., 427-50; 405, 406, 431, 432, 434, 437, 440, 441
Benson, A. A., 22, 23, 41
Bentley, O. G., 59
Benyajati, C., 246, 260, 262
Ben-Yakov, M., 148, 171
Bereczky, E., 432, 444
Berg, H. W., 323, 334, 336, 343, 345, 347, 348
Berg, R., 396, 413
Berge, G., 72, 75
Berger, G., 428
Bergmann, F. H., 512
Berken, A., 291
Berman, L. D., 414, 415, 416, 417
Bernard, F., 74, 77
Bernard, J., 398, 412
Bernaz, D., 324
Bernaz, Gh., 324
Bernhard, W., 439, 440
Bernier, G. M., 292
Berns, D. S., 23
Bernstein, S., 500
Berry, G. T., 369
Berry, L. J., 273
Bertani, G., 452, 458
Berwald, Y., 392, 413
Bezzegh, T., 324, 340, 347
Bhattacharyya, K., 260
Biberfeld, P., 439
Bidan, A., 328
Bide, R. W., 122
Biggins, J., 49
Bigley, D., 502, 512, 513
Billeter, M. A., 306, 312, 313, 316, 317
Birch-Andersen, A., 155
Birkenes, E., 72, 76
Bisalputra, T., 21, 23, 41
Biserte, G., 438, 440
Bishop, A., 113
Bishop, D. H. L., 233, 317, 318
Bishop, J. M., 309
Bishop, N. I., 48
Black, H. S., 275, 278
Black, L. W., 457
Black, M., 71, 77, 78
Black, P. H., 391-426; 393, 394, 396, 397, 398, 399, 400, 401, 402, 403, 406, 407, 408, 409, 411, 412, 413, 414, 416, 417, 418, 419, 431, 442, 444
Blacklow, N. R., 401, 416, 444
Blanchard, M. L., 343
Blaylock, B. A., 194, 499, 503
Blecker, H. H., 57
Bloch, K., 57
Bloom, W., 5
Bloomfield, B. J., 96, 97, 101
Blouin, J., 348
Bocciarelli, D. S., 444
Bockelmann, J. B., 349
Bocker, H., 341
Bode, V. C., 457
Bodo, G., 382
Boedtker, H., 306
Boeyé, A., 398, 443
Bögel, K., 221, 227, 235
Bogorad, L., 23
Böhringer, P., 323
Boiron, M., 398, 402, 412
Boldur, I., 148, 171
Bolen, W. A., 500
Bolton, E. T., 394, 417
Bone, D. H., 500
Boné, G. J., 112, 114
Boney, A. D., 72, 73, 74, 75
Bongers, L., 501, 507
Bonifas, V. H., 439, 440
Bonner, J., 56
Bool, P. H., 210
Booth, C. R., 53
Borek, C., 392

Borg, A. F., 349
Borge, W. D., 512
Borker, E., 269, 274, 276, 277
Borroughs, L. F., 341
Borst, P., 125, 306, 309, 313, 316
Bortels, H., 52, 59
Bouanchard, D., 147
Bouhag, R., 293
Boulanger, P., 438, 440
Bourdu, R., 23
Bourgaux, P., 400, 408
Bourgaux-Ramoisy, D., 433
Bouthilet, R. J., 349
Bowen, C. C., 18, 19, 21, 25, 29, 31, 33, 35, 36, 37, 38, 61
Bowen, H. J. M., 59
Bowen, T. J., 496, 497, 510, 511
Bowers, W. D., 102
Bowman, I. R. B., 122
Bowman, J. D., 293, 294
Braarud, T., 72, 74, 75, 76, 77, 78, 79
Bracewell, C. D., 214
Bracho de Kalamar, D., 332
Bracker, C. E., 102, 103
Bradish, C. J., 228, 229, 235
Bragg, P. D., 188
Brailovsky, C., 428
Braley, S. A., 498
Brandis, H., 159, 160
Branton, D., 47
Bratt, M. A., 319
Braun, W., 291, 293
Braunwald, J., 368, 369
Bravo Abad, F., 329, 333, 334, 339
Bréchot, P., 328, 344
Breed, R. S., 324, 340, 341, 346
Breese, S. S., Jr., 211, 221, 223, 224, 225, 226, 227, 228, 229, 231, 235
Brenner, S., 155, 288, 480, 484
Brenner, Z., 120
Brent, L., 290
Brescig, J. A., 349
Bresslau, E. L., 123, 125
Bretthauer, R. K., 104
Brewer, D., 272
Briggs, M. J., 369
Brill, W. J., 500
Brimacombe, R., 307
Brinton, C. C., Jr., 153, 155
Broberg, P. L., 192, 193
Brock, T. D., 42, 62, 102
Brodie, A. F., 193
Brody, S., 100
Brook, P. J., 269, 270, 271, 273
Brooks, K., 465, 472, 473
Brooksby, J. B., 202, 204, 205, 206, 207, 210, 211, 214, 216
Broquist, H. P., 116
Brown, A. H., 54
Brown, C. M., 100, 102
Brown, D. H., 103
Brown, D. L., 21, 23, 41
Brown, F., 203, 211, 212, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237
Brown, G. W., Jr., 50
Brown, J. W., 193
Brown, R. G., 89, 100
Brown, R. M., Jr., 38, 39
Brown, T. E., 59
Brownell, P. F., 52
Bruner, D. W., 209
Bryan, E., 412
Bryant, C., 121, 122
Bryant, M. P., 503
Buchanan, B. B., 50, 502, 503, 513
Buchanan, J. M., 409
Buckle, R. M., 414
Buckley, C. E., 284
Buckley, L. S., 211
Bujak, S., 338
Burdon, R. H., 306, 313, 316
Burge, W. D., 492, 494, 507
Burgi, E., 457, 464, 476, 477, 480
Burk, R. R., 395, 411, 429, 439
Burket, A. E., 396
Burmeister, H. R., 276
Burnet, F. M., 286, 365
Burns, R. C., 500
Burns, S. N., 136, 138, 150
Burns, V., 526
Burns, W., 419
Burris, R. H., 51, 52, 57, 185, 512
Burrows, A., 72, 73, 74, 75
Burrows, R., 208
Burrows, W., 245-68; 246, 247, 249, 251, 252, 253, 254, 255, 258, 262, 263, 264
Burt, L. M., 218
Burtsev, E. S., 334
Burwell, R. E., 291
Bussard, A. E., 290, 292
Butel, J. S., 398, 431, 443, 444
Butler, B., 464, 472
Butler, P. J., 496
Butler, W. H., 274, 275, 276
Butt, W. D., 492, 508
Büttner, D., 361, 364
Buu-Hoi, Ng. Ph., 276
Buyze, G., 340
Byekovsky, A. F., 367, 383

C

Cabib, E., 104
Cahnock, R. M., 398, 409
Cahoon, M. E., 118
Cairns, H. J. F., 366, 367, 368, 374, 382
Cairns, J., 56, 531
Calef, E., 455, 460, 466, 468
Calisher, C. H., 397
Callis, J. J., 205, 208, 216, 217, 218, 221, 223, 224, 229
Calli-Sforza, L. L., 141
Calvin, M., 22, 50
Camargo, E. P., 103, 112
Campana, R. J., 95, 96
Campbell, A., 452, 454, 455, 457, 459, 460, 461, 462, 463, 464, 466, 468, 471, 474, 476, 477, 478, 480, 524
Campbell, C. H., 203, 208, 215, 216, 237
Campbell, D. H., 290
Campbell, I. J., 155
Campbell, L. L., 184
Campion, R., 203
Candrea, M., 159, 160
Cannon, P. R., 5, 8
Cano Marotta, C. R., 328, 332
Cantarelli, C., 334
Cantino, E. C., 102
Cantor, C. R., 286
Capesius, I., 57
Capriotti, A., 324, 328, 329
Capstick, P. B., 211, 217
Caputi, A., Jr., 349
Carbonell, L. M., 102
Carles, J., 344
Carll, W. T., 269, 274, 276, 277
Carminatti, H., 104
Carnaghan, R. B. A., 274, 275
Carnahan, J., 153, 155
Carnahan, J. E., 52
Carney, P. G., 443
Carni, I., 330
Carni-Catsadimas, I., 330
Carnis, A., 330
Caro, L. G., 457, 471, 476

Carp, R. I., 396, 401, 402, 404, 405, 407, 431, 436
Carpenter, C. C. J., 255, 256, 258, 262
Carpenter, W. D., 103
Carr, J. G., 323, 341, 346, 347
Carr, N. G., 49, 52, 53, 54, 55, 57
Carraso, A., 340
Carré, H., 204
Carter, G. B., 365, 366
Carter, S. P., 205, 213
Cartwright, B., 212, 224, 225, 226, 227, 228, 230, 232, 233, 236, 237
Cartwright, S. F., 224, 232
Casey, M. J., 398, 409, 444
Caskey, T., 307
Cassel, W. A., 24
Cassignard, R., 340, 344, 345
Cassingena, R., 419
Cassle, M., 526
Castellani, O., 112
Castelli, T., 323, 324, 325, 326, 328, 329, 333, 334, 337
Castenholz, R. W., 48, 50, 59, 61, 62
Castle, J. E., 52
Casto, B. C., 444
Castor, J. G. B., 334
Castor, L. N., 191, 193, 194
Caughey, W. S., 192
Cavalli, L. L., 141
Cebra, J. J., 292
Cederstrand, C., 58
Cedillos, R., 112
Ceglowski, W. S., 236
Celada, F., 292
Cerottini, J. C., 401
Chabbert, Y. A., 147
Chadefaud, M., 72, 78
Chagoya, V., 375, 435
Chalmers, T. C., 259
Chance, B., 182, 184, 186, 191, 192, 193, 194, 504, 508
Chandler, B. L., 24, 25, 457
Chandra, J., 252, 264
Chang, J. P., 189
Chang, L. M., 375
Chang, S. H., 306
Chang-Chu, L. Tu, 513
Changeux, J. P., 405, 436, 437
Chapman, D. J., 20, 58
Chapman, J. A., 23
Chapman, W. G., 205, 211, 217
Chapple, P. J., 363
Charles, A. M., 496, 497, 498, 506, 510, 511
Charunmethee, P., 250, 251, 264
Chatterje, D. N., 251, 252
Chauvet, J., 328, 344
Cheng, P. Y., 452
Cheng, V., 293
Chet, I., 96
Cheung, W. Y., 52
Chiappino, G., 292, 298
Chibisova, V., 415
Chieco-Biance, L., 292
Choay, J., 221
Chordi, A., 364, 377
Choules, G. L., 293
Chow, T. J., 77
Christensen, M. D., 344
Christensen, T., 71
Chuat, J., 402
Chulasamaya, M., 250, 251
Chung, K. L., 104
Church, R. B., 298
Ciacco, G., 226
Ciegler, A., 276
Ciferri, R., 336
Cinader, B., 284, 300
Citarella, R. V., 145, 174
Citri, N., 112
Ciuca, A., 204
Claman, H. N., 299
Clare, N. T., 270
Clark, A. J., 465
Clark, D., 519
Clark, T. B., 110, 123
Claus, G., 20, 22, 31, 33, 35, 36, 37, 64, 65
Claybrook, J. R., 317, 318
Clem, L. W., 289, 290
Clendenning, K. A., 59
Clifford, J. I., 273, 275
Cloud, P. E., Jr., 81
Clowes, R. C., 151, 467
Cobb, H. D., Jr., 50
Cocito, C., 442
Cocks, G. T., 296
Cocuzza, G., 404, 436
Coggeshall, L. T., 9
Coggins, R. A., 343
Cogniaux-Le Clerk, J., 385
Cohen, E. P., 283-304; 290, 291, 293, 294, 299, 367
Cohen, G. H., 377, 378
Cohen, S., 159, 160, 284, 293, 294
Cohen-Bazire, G., 21, 23
Cohn, M., 284, 285, 292, 298
Cole, J. A., 185
Cole, R., 521
Cole, W. J., 58
Coleman, W. H., 253, 254, 264
Collins, B. W., 270, 271, 272
Collins, J. F., 502, 512, 513, 534
Colmer, A. R., 496
Colvin, J. R., 88, 96
Colwell, L. S., 273
Coman, D. R., 398
Combs, R. E., 344
Connell, G. E., 287
Conolly, D., 364
Conti, S. F., 23, 102, 183, 193
Cook, B., 526
Cook, J., 526
Cooke, G. M., 342, 344
Cooke, R., 540
Coombs, J., 53
Cooper, B. A., 93
Cooper, H. L., 412, 413, 414
Cooper, P. D., 307
Cooper, S., 309, 316
Coppey, J., 419
Coraggio, F., 443
Correll, D. L., 35
Cosgrove, W. B., 123
Costilon, R. N., 194
Cota-Robles, E., 101, 102, 103
Coto, C., 406, 434, 441
Coto, V., 443
Cottral, G. E., 203, 206, 207, 208, 218, 237
Couchoud-Beaumont, P., 194, 195
Coventry, F. A., 8
Cowan, K. M., 203, 206, 213, 228, 229, 234, 235, 236, 237
Cowen, D. M., 300
Cowie, D. B., 394, 467
Cowperthwaite, J., 115, 116
Cox, B. F., 206
Cox, H. R., 396
Cox, R. M., 23, 51, 52
Crabb, W. E., 172
Craddock, C. G., 290
Craig, J. P., 256, 257, 262, 263, 264
Craig, L. C., 285
Craigie, J., 137, 156
Cramer, R., 400, 406, 442
Crane, F. L., 501
Crawford, E. M., 153, 394, 399, 406
Crawford, L. V., 393, 394, 395, 399, 412, 428, 429, 439
Crawley, W. E., 273
Crenshaw, M. A., 72, 76, 77, 78, 79, 80, 81, 82
Crespi, H. L., 17, 19
Crick, F. H. C., 285, 309

Crick, J., 203, 211, 212, 225, 226, 229, 236
Cronquist, A., 96
Crook, E. M., 89, 93, 94, 96, 97, 98, 99
Crosby, L. K., 290, 291
Croson, M., 344
Cross, R. J., 259
Crowther, R. F., 334
Cruess, W. V., 323, 334, 336, 343, 345, 347, 348
Culwick, A. T., 121
Cumming, A., 218
Cummings, D., 542
Cummings, C. S., 92
Cunha, R. G., 215
Cunliffe, H. R., 210, 212
Cusanovich, M. A., 186, 187
Cuzin, F., 155

D

Dabkowski, W., 338
Daesch, G. E., 431
Dale, B. N., 260
Dale, C. N., 205, 210, 212
Dales, S., 361, 366, 367, 372, 383, 439
D'Alesandro, P. A., 11, 115
Dal Prato, A., 211, 217
Dalton, D., 365
Danforth, W. F., 110
Dardiri, A. H., 234
Darlington, R. W., 363, 367
Darnell, J. E., 307, 309, 312
Das, M. L., 290
da Silva Babo, F., 344, 345
Datta, N., 133, 147, 151, 153, 154, 159, 161, 172
Daumron, A., 368
Dautrevaux, M., 438, 440
Davern, C. I., 385
Davidson, J. T., 510
Davie, J., 204, 205
Davies, E. B., 212, 213, 214
Davies, J., 192
Davis, B. D., 371
Davis, E. A., 496, 506
Davis, E. B., 40
Davis, N. D., 274
Dawid, I. B., 125, 126
Dawkins, A. W., 277
Dawson, D. M., 297
De, D. N., 24
De, S. N., 251, 252, 260, 264
De, S. P., 260, 262
Deacon, T. E., 510
Deane, M. P., 113, 123
Deb, B. C., 249, 262
De Becze, G. I., 324
DeBoer, C. J., 215
DeBoutand, F., 290
Dedrick, H. M., 369
Deeb, S. S., 188, 189
Defendi, V., 392, 400, 401, 402, 403, 407, 410, 411, 412, 413, 416, 431, 442
Deflandre, G., 77, 78
Deftos, L. J., 414
Degruse, P. E., 277
de Haan, P. G., 141, 340
de Harven, E., 364, 366, 367, 383
Deichman, G. I., 400, 415, 416
de Klerk, H., 181, 182, 183, 185, 187
Delaney, R., 285, 287
DeLay, P. D., 234
del Campillo, A., 343
del Campillo-Campbell, A., 464
Delgarno, L., 309
Delius, H., 309, 312, 317
Dellers, R. W., 207
Delong, S. S., 367
Delorme, E. J., 291
Delwiche, C. C., 492, 494, 507, 512
DeMaeyer, E., 398
de Miranda Pato, C., 348
Dent, C. H. R., 270
Derrenbacker, E. C., 58, 93
Desikachary, J. V., 48
DeSomer, P., 442
Desowitz, R. S., 113
de Terra, N., 92, 96, 97, 99
de Toledo, O. Z., 332, 335
deTorres, R. A., 402, 403, 405, 406, 418, 419, 435, 436, 437, 442
Dettori, R., 157
D'Eustachio, A. J., 500
De Vault, D., 186
Devers, G. A., 419
De Vries, M. J., 337
DeWachter, R., 307
Dewey, V. C., 116
Dhennin, L(éone), 213, 214, 221
Dhennin, L(ouis), 213, 214, 221
Diamandopoulos, G. T., 396, 402, 410, 414, 415
Diamond, L., 398
Diaz, R., 364, 377
Dick, G., 385
Dickerson, R. E., 182, 184
Diddens, H., 324
Diderholm, H., [illegible], 396, 413
Diener, E., 292
Diener, T. O., 38
Diener, V. L., 274
Dietrich, C. P., 103
Diggelmann, H., 406, 430, 432
Dilworth, M. J., 51
DiMayorca, G., 406, 440, 441
di Menna, M. E., 270, 332
Din, G. A., 512, 513
Dingley, J. M., 270
Dingman, C. W., 275
Dinter, Z., 218, 219, 220, 221, 222, 224, 225
Dirksen, M. L., 409
Distler, J. J., 97
Ditmars, W. E., 126
Dittrich, H. H., 338, 339, 344, 347
Dixon, G. H., 287
Dixon, P. S., 71
Dizon, J. J., 262
Dmochowski, L., 432
Doctor, B., 307
Dodonova, N. N., 400, 415, 445
Doerfler, W., 457
Doi, R. H., 193, 306, 309
Domer, J. E., 96, 100
Domercq, S., 323, 324, 325, 327, 328, 331, 335, 336, 340, 341, 344, 345
Done, J., 270, 271, 273
Doolittle, R. F., 285
Dorner, M. M., 285
Dorrington, K. J., 284
Doss, H., 262
Dostal, V., 385
Doty, P., 126, 144, 145, 174, 290
Douglas, H. C., 339, 341, 347
Douglas, S. D., 77, 79, 80
Doupnik, B., 279
Dove, W. F., 452, 455, 456, 464, 470, 471, 472, 484
Downey, R. J., 193
Downie, A., 371, 385
Dragesco, J., 72, 78
Dragoni, N., 184, 503
Drake, J. W., 479
Draper, L. R., 10
Drawert, F., 339
Drawert, H., 18, 19, 20, 21, 31, 35
Dray, S., 289, 290, 297
Dresser, D. W., 299
Drew, E. A., 64
Drews, G., 17, 18, 19, 21, 22, 31, 33, 36, 58
Dreyer, W. J., 284, 285, 286, 289

Driskell, P. J., 145, 174
Driskell-Zamenhof, P., 452, 458
Driskell-Zamenhoff, P. J., 145, 174
Droop, M. R., 72, 75, 76, 77
Drouet, F., 48, 56
Drucker, H., 184
Duane, W. C., 49
Dubbs, D. R., 375, 383, 384, 385, 402, 403, 404, 405, 406, 418, 419, 433, 434, 435, 436, 437, 442
Dubiski, S., 297
Du Buy, H. G., 125, 126
Dudnykov, A. I., 203
Duesberg, P., 319
Dugan, P. R., 498, 499
Dugdale, R. C., 51
Duguid, J. P., 153, 155, 159
Duhamel, R. C., 259
Duhm, B., 349
Dulbecco, R., 371, 392, 393, 395, 396, 399, 403, 404, 406, 410, 413, 414, 415, 418, 419, 430, 431, 435, 436, 437, 440, 441, 442
Dumbell, K. R., 364, 366, 368, 369
Dumitrescu, I., 324
Duncan, D. W., 498
Dunlap, R. C., 365, 370
Du Plessis, L. de W., 330, 340, 341, 342, 343, 344, 346
Dupuy, P., 324, 341
Durrell, L. W., 51
Dus, K. M., 181, 182, 183, 184, 185, 186, 187
Dutt, A. R., 262
Dutta, B. N., 115, 116
Dutta, N. K., 250, 251, 258, 261, 262
Dutton, M. F., 274
Dutton, R. W., 292
Duysens, L. N. M., 49, 186
Dvorak, H. J., 291
Dworkin, M., 193
Dyke, K. G. H., 88, 98

E

Eakman, J., 527, 534, 545
Easley, C. W., 285
Easterbrook, K. B., 361, 362, 363, 367, 368, 370, 375, 377, 378, 381, 384, 385
Easton, J. M., 444
Eberhardt, U., 500, 501
Echlin, P., 17, 18, 20, 21, 22, 23, 24, 29, 37, 48, 50, 58, 61, 65
Echols, H., 452, 464, 465, 469, 470, 472, 476, 479, 480, 481
Eddy, A. A., 93, 100
Eddy, B. E., 415
Edelman, G. M., 283, 284, 287, 289, 290, 293
Edelman, M., 56, 64
Edwards, M., 186
Edwards, M. R., 23
Egamberdiev, N. B., 338
Egami, F., 190, 496, 504
Egan, J. B., 457
Egawa, R., 147, 160
Egdahl, R. H., 291
Eggen, K., 308
Eggers, H. J., 393, 412, 438
Ehrenberg, A., 186
Eichhorn, A., 215
Eichner, R. E., 263
Eikom, T. S., 316
Ein, E., 289
Eisen, H. A., 456, 464, 471, 472, 474, 475
Eisen, H. N., 293, 294, 371
Eisenberg, D., 182, 184
Eisenberg, W. V., 274
Eisenman, R. N., 117, 118, 119, 125, 126
Eissa, A. A., 262
El-Azhari, A., 262
Elbein, A. D., 103
Elfrefai, A. E. M. H., 58
Elliot, A., 433
Ellis, J. J., 269
Ellison, S. A., 367
El-Mofty, A., 262
Elsworth, R., 519
Enders, J. F., 392, 396, 397, 402, 410, 412, 414, 415
Engel, M. S., 493
Engelberger, F. M., 285
Enger, M. D., 306, 307
Engleberg, J., 527, 539, 541, 542
Engler, R., 366
Eoyang, L., 316, 317
Ephrussi, B., 420
Eppenberger, H. M., 297
Eppley, R. W., 75, 82, 83
Epstein, H. T., 56, 64
Epstein, M. A., 433, 438
Erikson, E., 311, 313, 314, 317, 318
Erikson, R. L., 305-22; 305, 309, 310, 311, 312, 313, 314, 317, 318, 363
Erlandson, R. A., 433, 438
Ernster, L., 509
Eron, L. J., 375
Errington, F., 521, 526, 533
Esau, P., 342
Espenson, L., 227
Estabrook, R. W., 182, 190, 192
Etchells, J. L., 342, 349
Evans, D. J., Jr., 250, 258
Evans, H. J., 58
Evans, M. C. W., 50, 502, 513
Eveleigh, D. E., 97
Everett, G. A., 306
Ewaldsson, B., 205, 236
Ewton, D., 366, 374, 379, 380, 383
Exell, G., 55
Eyster, C., 58
Eyster, H. C., 59

F

Fadenko, P. S., 342
Fagerland, E., 72
Fagg, R. H., 208, 218
Fahey, J. L., 283, 289
Fahlberg, W., 293
Fairbairn, H., 121
Falcone, A. B., 193, 494
Falcone, G., 88, 98, 99, 101, 102
Falke, D., 433, 438
Falkow, S., 126, 144, 145, 174, 175
Famatiga, E. G., 260
Fanger, M. W., 187
Farafontoff, A., 334
Farr, W. K., 96
Farrant, J., 363
Farris, H. E., Jr., 213
Faulkner, R. D., 306
Fay, P., 23, 40, 51, 53, 54, 60
Fayet, M.-T., 218
Fedida, M., 211
Fedorčak, I., 349
Feduchy, E., 329, 333, 337
Feeley, J. C., 255, 256, 258, 260, 262
Feinendegen, L. E., 442
Feinstein, A., 284
Feix, G., 316, 317, 318
Feldman, L. A., 431, 443
Feldman, M., 291, 292
Feldmann, J., 72, 78
Felix, A., 156
Fell, G., 340, 341, 345
Feller, W., 540
Fellman, J. H., 194
Fellowes, O. N., 222, 224, 226, 227
Fellows, R. E., Jr., 285, 287
Felsenfeld, G., 317

Felsenfeld, O., 246, 254, 260
Fenner, F. J., 363, 364, 365, 367, 368, 369, 371, 377
Fenwick, M. L., 306, 309, 310, 311, 313, 317
Fernandes, J. F., 112
Fernandes, M., 396
Ferrari, W., 384, 385
Ferré, L., 344
Ferris, R. D., 365
Fewson, C. A., 52, 502
Field, A. K., 220
Fiers, W., 307
Filshe, B. K., 363
Finch, J. T., 393
Finkelstein, R. A., 248, 250, 251, 262, 263, 264
Finn, J., 293
Finney, D., 524, 525
Firket, H., 125
Fischer, A., 29
Fischer, H., 440, 442
Fischer, I., 492, 506, 507
Fischer-Fantuzzi, L., 460, 466, 478, 479, 480, 481, 482
Fish, R. C., 205, 210, 212
Fisher, A. B., 8
Fisher, E., 493, 497, 498
Fisher, E. E., 277
Fisher, H. F., 499
Fisher, T., 493
Fishman, M., 290
Fitzgerald, G. P., 50, 56, 58, 59
Fitz-James, P. C., 21, 103
Fjelde, A., 412
Flanagan, J. F., 429, 431, 434
Flatmark, T., 181, 182, 183, 185, 187
Fleischman, J. B., 283, 289
Fleming, H. P., 342
Flesch, P., 341, 342, 343
Flint, E. A., 61
Florenzano, G., 323, 337
Flores-Carreon, A., 104
Florkin, M., 182, 185, 188, 192, 194, 195
Flynn, V., 55
Focht, D. D., 341
Fogedby, E. G., 207, 212
Fogel, M., 442
Fogg, G. E., 23, 33, 37, 38, 40, 51, 59, 60, 92, 93
Fong, J., 365
Fontaine, J., 212
Ford, C. E., 300
Forgacs, J., 269, 274, 276, 277
Forget, B. G., 430
Formal, S. B., 175, 252, 264
Fornachon, J. C. M., 324, 332, 334, 339, 340, 341, 342, 343, 344, 345, 347, 348
Forrest, H. S., 48, 49
Forrester, I. T., 272
Forrester, J. A., 411
Fouad, A., 366
Fougereau, M., 213, 214, 284
Fournier, R. O., 77
Fracastorius, H., 202
Fraenkel-Conrat, H., 307
Fraley, E. E., 414
Franck, F., 284
Francke, R., 310, 312
Frank, H., 18, 19, 20, 58, 393, 412, 438
Frank, O., 116
Franklin, E. C., 293
Franklin, N. C., 455, 456, 459, 469, 470, 471, 473, 475, 477
Franklin, R. M., 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 317, 318
Franklin, T. J., 147
Fraser, A., 156
Fraser, D. K., 462
Fraser, K. B., 399, 400, 408
Frearson, P. M., 403, 404, 405, 434, 435, 436
Fredericks, H. H. J., 207
Fredrick, J. F., 29
Fredricks, W. W., 501
Fredrickson, A., 519, 527, 534, 545
Freeman, A. E., 397, 398, 399, 417
Freeman, G., 397
Freeman, T. E., 278, 279
Frei, P. C., 299
Freiberg, K. J., 334
Freifelder, D., 459
Frenkel, A. W., 53
Frenkel, H. S., 207, 210, 216
Frenkel, S., 207
Fresh, J. W., 246, 264
Freter, G. G., 11
Freter, R., 261
Frey, R., 94, 96
Frey-Wyssling, A., 16, 17
Fridlender, B., 56, 58
Fridrichsons, J., 270
Fried, M., 393, 399
Friedman, H. P., 290
Friedman, J. C., 398, 412
Friedman, R. M., 309
Friedman-Kien, A. E., 364
Fritsch, F. E., 18, 31, 33, 35, 37, 39, 41, 60
Fromageot, C., 495
Fromentin, H., 113
Frosch, P., 202
Fuchsman, W. H., 192
Fuerst, C. R., 456, 461, 462, 464, 471, 472
Fuggmann, R. A., 417
Fugii, Y., 397
Fuhrman, F. A., 258
Fuhrman, G. J., 258
Fuhs, G. W., 17, 19, 22, 24, 29, 33, 35, 36
Fujii, T., 291
Fujinaga, K., 417, 418, 430, 431
Fujita, T., 184, 185, 188, 189
Fujita, Y., 49, 50, 51, 53, 54, 58
Fujiwara, S., 432, 433, 439
Fukasawa, T., 133, 138, 142, 148, 153
Fukazawa, Y., 91, 99
Fukushima, T., 132, 133
Fulco, L., 19
Fuller, M. S., 90, 93, 94, 102
Fuller, R. C., 23
Fulton, J. D., 115, 121

G

Gaarder, K. R., 74, 78, 79
Gafford, L. G., 363, 365, 367, 374
Gailiunas, P., 203, 206, 217, 218, 237
Galasso, G. J., 370, 383
Galbraith, N., 171
Gale, N. L., 513
Galeota, C. A., 443
Gallagher, C. H., 272
Gallant, J. A., 478
Gallely, R., 291
Galloway, I. A., 205, 211
Galloway, R. A., 42
Galliut, J., 250
Gally, J. A., 284, 287
Gancedo, C., 89
Gancedo, J. M., 89
Gandini, A., 324, 338, 339
Gangarosa, E. J., 246, 261
Ganguli, B., 190
Ganguli, N. C., 256
Ganguly, R., 260
Gantt, E., 23
Gardner, N. L., 29
Garland, A. J., 217
Garrido Marquez, J., 334
Garschagen, H., 349
Garvey, J. S., 290
Garwes, D. J., 307

Garzuly-Janke, R., 92, 98
Gasic, G., 411
Gassner, E. B., 58
Gedebon, M., 160
Gehle, W. D., 444
Geiduschek, E. P., 309
Geigy, R., 113
Geiss, E., 227
Geitler, L., 35
Gell, P. G. H., 298
Gellert, M., 457, 463
Gemmel, A., 367, 368
Gemski, P., Jr., 153, 155
Genevois, L., 349
Genth, H., 349
Gentry, G. A., 363
Geoghegan, V. P., 171
Georgi, C. E., 193
Gerber, P., 418, 419
Gerhardt, B., 49
Gerloff, G. C., 50, 52, 56, 58, 59
Gershon, D., 396, 406, 407, 408
Gessa, G. L., 384, 385
Gest, H., 184, 499, 500
Gesteland, R. F., 153, 306
Gezelius, K., 92
Ghendon, Yu. Z., 218, 220
Ghose, M. L., 252, 264
Ghosh, A. K., 50, 260
Ghosh, S. N., 24, 256, 382
Gibbs, M., 50, 52
Gibson, E. J., 104
Gibson, J., 186
Gibson, Q. H., 186
Gierløff, B. C. H., 216
Gierschner, K., 349
Giese, H., 364
Giesy, R. M., 24, 29, 31, 39, 41, 57
Gifford, G. E., 365, 382
Gilden, R. V., 396, 401, 402, 407, 431
Gilead, Z., 431
Gilgan, M. W., 277
Gill, F. A., 159, 160
Gill, J. W., 117, 118
Gillespie, J. H., 209, 213
Gillissen, G., 349
Ginger, C. D., 113
Gingery, R., 464, 465, 469, 470, 476, 479, 480, 481
Gini, B., 339, 346, 347
Ginsberg, H. S., 371, 429, 431, 440
Gioia, M. N., 340
Giordano, A. R., 207, 212, 226, 237
Girard, H., 328
Girard, M., 312
Girardi, A. J., 396, 412, 419
Glaser, L., 103
Glaser, P., 115
Glaubitz, M., 324
Glauert, A. M., 17, 18, 24, 25
Glisin, U. R., 290
Globerson, A., 413
Gnore, M., 57
Godfrey, D. G., 113
Godoy, G. A., 112
Goering, J. J., 51
Gohar, M. A., 262
Gold, E., 433, 434
Goldberg, B., 414
Goldberg, I. H., 308
Goldman, D. S., 193
Goldsmit, L., 214
Goldstein, D. A., 38, 39
Gollwitzer, W., 19, 58
Golub, E. S., 299
Goma, T., 262
Gomez, C. Z., 262
Gönczöl, E., 439
Gonzalves Teixeira, C., 332
Good, R. A., 300
Goodman, H. S., 293
Goodwin, T. W., 58, 113
Gopalan, C., 275
Gordon, J. A., 311, 313, 314, 317
Gordon, S., 284
Gorham, P. R., 50, 59, 61
Gorhe, D. S., 218, 220
Gorski, J., 291
Goryunova, S. V., 57
Goto, S., 334
Gottesman, M., 464, 466, 467, 468, 469, 470, 473, 474, 475, 476, 478, 480
Gottlieb, A. A., 290
Goulian, M., 318
Govindjee, 50, 58
Gowans, J. L., 290, 300
Grace, J. T., Jr., 365, 373, 436
Grady, G. F., 259
Granboulan, N., 314, 439
Grant, P. T., 121, 122, 124
Grassl, M., 192, 193
Graves, J. H., 203, 206, 210, 212, 213, 215, 225, 226, 228, 229, 234, 235, 236, 237
Gray, C. T., 184, 185, 499
Gray, W. R., 285, 286
Green, H., 396, 397, 399, 406, 407, 408, 409, 410, 411, 413, 414, 420, 443
Green, I., 292
Green, J. C., 79
Green, M., 375, 393, 394, 417, 418, 428, 429, 430, 431, 432, 435, 438, 439
Greenblatt, C. L., 115
Greenblatt, G., 112
Greenland, R. M., 368, 370
Greenough, W. B., III, 261
Gregory, C., 401
Gregory, J. D., 510
Grey, H. M., 284
Griffiths, D. B., 272
Grilli, M., 40
Grimstone, A. V., 110
Grogan, E., 396
Gross, J. D., 146, 467, 471
Grossowicz, N., 112
Groyon, R. M., 371
Gualandi, G. L., 210
Guerrini, F., 468, 478, 482
Guillard, R. R. L., 75, 76, 77
Guilliermond, A., 324
Guimarais, A. F., 344, 345
Guimberteau, G., 344
Guinée, P. A. M., 156, 168
Gulasekharam, J., 260
Gunsalus, I. C., 190
Gusev, M. V., 48, 50
Gussin, G. N., 307, 308
Guthrie, S., 309
Gutteridge, W. E., 118
Guttman, H. N., 110, 114, 115, 117, 118, 119, 125, 126

H

Haas, R., 430, 432, 442
Habala, I., 327
Habbu, M. K., 250
Habel, K., 392, 394, 402, 403, 407, 409, 415, 416, 417, 445
Haber, E., 284
Hackenthal, E., 492
Hackenthal, R., 492
Hackett, D. P., 53
Haendiges, V. A., 365, 366
Hagedorn, H., 18, 19, 24
Hager, L. P., 188, 189
Halicki, P. J., 53
Hall, H. H., 276
Hall, J. E., 291
Hall, R. H., 436
Hall, R. P., 110
Hall, W. T., 20, 22, 31, 33, 35, 36, 37, 64, 65
Hallaway, M., 49, 53, 55
Halldal, P., 50, 61, 77, 78
Halls, S., 134, 160, 173
Halvorson, H., 193

Hamada, C., 405, 431, 433, 434
Hamilton, J. G., 96, 100
Hamilton, L. D. E., 291
Hamilton, P. B., 89, 96
Hamilton, R. D., 382
Hamlin, M., 292
Hammon, W. McD., 444
Hanafusa, H., 366, 369
Hanafusa, T., 369
Hanawalt, P., 531, 532
Hanchey, P., 278
Hannah, D. E., 272, 273
Hansen, H. N., 277
Hansen, J., 493
Hansen, R. G., 104
Happold, F. C., 496, 497, 510, 511
Hara, S., 341
Harada, K., 133, 142
Harbury, H. A., 187
Harder, R., 54
Hardy, R. W. F., 500
Hare, J. D., 400, 415, 416
Harkin, J. C., 96, 100
Harold, F. M., 97
Harris, G., 290, 292
Harris, H., 92, 297, 418, 419
Harris, R. G., 411
Harris, R. V., 57
Harris, T., 540
Harris, W. J., 361
Harrison, J. A., 5
Hartley, J. W., 398
Hartley, R. D., 275
Hartman, K. A., 308
Hartwell, L. H., 403, 404, 406, 430, 431, 435, 440
Haruna, I., 309, 316, 317
Harvey, B. A. M., 433
Harvey, R., 524, 533, 534, 535, 536, 537
Haselkorn, R., 25, 38
Hashimoto, H., 133, 160
Hasle, G. R., 75, 77
Hassid, W. Z., 103
Hatanaka, M., 404, 436, 437, 442
Hatch, M. D., 513
Hatchikian, E. C., 503
Hatfield, D., 307
Hatfield, D. L., 49
Hattori, A., 50, 51, 53, 54, 55, 58
Hauge, J. B., 189
Haurowitz, F., 289
Hausen, P., 406, 407, 431, 441, 442
Haushofer, H., 349
Hawirko, R. Z., 104
Hawker, L. E., 102
Hawkins, C., 533
Hay, J., 395, 429, 434, 439
Hayashi, K., 431, 438
Hayes, W., 174, 452, 458
Haynes, G. R., 405, 434
Haywood, P., 102
Heathcote, J. G., 274
Hebert, R. R., 308
Hecke, F., 216
Hedger, R. S., 204
Hedrick, L. R., 100
Hegner, R. W., 3
Heidelberger, M., 10
Heilman, D. B., 291
Heinen, H., 495
Hellström, I., 396, 412, 415
Hellström, K. E., 396, 412
Helmstetter, C., 531, 532, 542
Hempfling, W. P., 496, 505, 511, 513, 514
Henderson, D. A., 262
Henderson, R. W., 185
Henderson, W. M., 205, 206, 211, 228, 229, 235
Hendrix, R., 471, 475, 477, 483
Hendy, R. J., 102
Henfschel, E., 77
Henis, Y., 96
Henle, G., 400
Henle, W., 400
Hennig, K., 348, 349
Henry, P. H., 397, 398, 406, 407, 417, 442
Herbert, D., 519
Herde, P., 375
Herniman, K. A., 204
Hershey, A. D., 455, 457, 464, 467, 475, 476, 477, 480
Hertman, I., 465
Hertzberg, S., 58
Herwatt, F., 349
Herzenberg, L. A., 296, 297
Hess, W. R., 205, 208, 216, 217, 218, 221, 223, 224, 229
Hesseltine, C. W., 269, 276
Hettinger, T. P., 187
Hiatt, C. W., 444
Higashi, T., 187, 195
Hill, R. W., 285, 287
Hilleman, M. R., 220, 419
Hilschmann, N., 285
Hinkle, M. E., 498
Hinshelwood, C., 519
Hinze, H. C., 371, 400
Hirai, K., 190, 191
Hiramoto, R. N., 292
Hirota, T., 142
Hirsch, H., 539, 541, 542
Hirsch, P., 493
Hirt, B., 394, 415, 432, 440, 441, 442
Hoare, C. A., 110, 111, 120
Hoare, D. S., 52, 53, 55
Hoare, S. L., 52, 55
Hobohm, K. O., 211
Hoch, G., 54
Hoch, G. E., 491, 492, 510, 514
Hocht, H., 18, 19
Hodes, M. E., 366, 374, 375, 379, 380, 383, 437
Hodges, R., 270, 271
Hodgetts, R. B., 459, 472
Hoffman, D. B., 459, 472
Hoffmann-Berling, H., 309
Hofman, T., 493, 494
Hofschneider, P. H., 309, 310, 312, 317
Hofsten, A. V., 24
Hogan, G. C., 55
Hoggan, M. D., 409, 428, 443
Höglund, S., 438, 439, 440
Hogness, D. S., 457
Hohl, M. C., 49
Hohn, T., 308
Holaday, C. E., 274
Holbach, B., 343
Holden, M., 367
Holland, I. B., 316
Holley, R. W., 306
Hollinger, S., 397
Hollinshead, A. C., 416, 431, 432
Holm, S. E., 362
Holmes, I. H., 369
Holm-Hansen, O., 47-70; 50, 51, 52, 53, 57, 58, 59, 62, 63, 64
Holohan, P. D., 57, 58, 61
Holowczak, J. A., 361, 362, 377, 378, 379, 382, 383, 384, 402
Holtermann, O. A., 373
Holton, R. W., 49, 53, 57
Hong, R., 300
Honya, M., 500
Hood, J., 524, 526, 531, 533
Hood, L., 285, 286
Hood, W., 52, 54
Hook, E. W., 159, 160
Hooper, A. B., 193, 493, 494
Hoover, S. R., 54
Hopwood, D. A., 17, 18, 24, 25
Hori, K., 190, 316, 317
Horibata, K., 292
Horikoshi, K., 88, 89, 96, 97, 101, 102
Horio, T., 183, 184, 185, 187, 190, 191, 195
Horiuchi, K., 307

Horiuchi, Y., 184
Horne, R. W., 117, 123, 125, 361, 364
Horodniceanu, T., 146, 159, 160
Hortobágyi, T., 56
Horwatitsch, H., 349
Hoshino, J., 133
Hough, J. S., 100, 102
Houwink, A. L., 98
Hove, E. L., 271, 273
Howarth, L., 343
Howatson, A., 284
Howell, J., 61
Howland, J. L., 193
Hoyer, B. H., 299
Hradecna, Z., 464, 472
Hsu, K. C., 367, 378, 438, 439
Huang, E., 513
Huber, G. S., 258
Huck, J., 2
Huebner, R. J., 393, 397, 398, 399, 403, 409, 416, 417, 431, 432, 444
Hughes, D. E., 184, 185
Hughes, R., 432
Hulač, A., 338
Hulburt, E. M., 75
Hume, V. B. M., 377, 381
Humphrey, J. H., 300
Hungerford, D. A., 412
Hurst, H., 89
Husfeld, D. B., 324
Hüskens, G., 341, 343
Huskey, R., 477, 483
Hutchinson, M., 495
Hutchinson, W. G., 24
Hutner, S. H., 71, 115, 116
Hybner, C. J., 398, 443
Hyde, J. M., 363
Hyslop, N. St. G., 205, 206, 207, 208, 211, 212, 213, 218, 226

I

Ibrahim, M., 262
Ichihashi, Y., 366, 367
Igel, H. J., 398, 409, 444
Iglewski, W. J., 318
Ignatov, M. P., 334
Iida, S., 88, 89, 96, 97, 101, 102
Iijima, T., 142
Ikovataya, G. M., 206
Ilagaki, E., 492
Imai, K., 502
Ingraham, J. L., 339, 342, 344, 345
Ingraham, L., 457, 464, 467, 476, 477, 480
Ingram, V. M., 286, 298
Iñigo Leal, B., 325, 329, 333, 334, 338, 339
Inman, J. K., 293
Inman, R. B., 464
Insalata, N. F., 269, 274, 276, 277
Irlin, I. S., 415
Irrmann, R., 344
Isaac, P. K., 104
Iseki, S., 155
Isenberg, H. D., 76, 77, 78, 79, 80, 81, 82
Ishiki, Y., 132
Ishimoto, M., 184, 496, 502, 503, 504
Islam, M. A., 262
Itagaki, E., 188, 189
Itahashi, M., 190
Ito, Y., 392, 405
Ivanova, L. S., 340, 342
Iverson, G. M., 296, 297
Ivlev, P. F., 334
Iwasaki, H., 185, 189, 191, 192, 193
Iwata, K., 397
Iwert, M. E., 249, 252, 253, 254

J

Jackson, N. L., 445
Jacob, F., 56, 136, 150, 153, 155, 452, 453, 455, 456, 458, 464, 468, 471, 472, 475
Jacob, M., 306
Jacobs, N. J., 193
James, A. T., 57
Jankovic, B. D., 291
Janssen, E. F., 11, 12
Jaroslow, B. N., 11, 12
Jarret, O., 415
Jaulmes, P., 348
Jaworski, E. G., 96, 103
Jayne, A., 363
Jeffrey, S. W., 76
Jeney, E., 439
Jenkin, C. R., 252
Jenkins, F. P., 274
Jennings, D. H., 77
Jennings, H. S., 1
Jensen, F. C., 396, 400, 419
Jensen, R. G., 49
Jensen, S. L., 58
Jensen, T. E., 35, 37, 38
Jerchel, D., 341, 342, 343
Jerkofsky, M., 443
Jhala, H. I., 250, 251
Jimenez-Martinez, A., 89, 93
Jirgensons, B., 275
Johnson, B. F., 104
Johnson, C. D., 226, 229
Johnson, E. J., 496, 506, 510, 512, 513
Johnson, E. M., 113
Johnson, G. V., 58
Johnson, M. L., 207, 212
Johnson, P. A., 504
Johnson, R. T., 307
Johnston, I. R., 89, 93, 94, 96, 97, 98, 99
Johnstone, K. I., 495
Joklik, W. K., 359-90; 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 402
Joly, S., 335
Jones, C. M., 137, 139, 141, 142, 150, 151, 152
Jones, C. W., 185, 194, 195
Jones, L. W., 49, 50
Jones, O. T. G., 193, 493
Jones-Mortimer, M. C., 504
Jordan, E., 455, 476
Joseph, P. R., 262
Joslyn, M. A., 323, 334
Josse, J., 394, 395
Jost, M., 18, 19, 20, 21, 22, 36, 37, 38, 41
Joyner, A., 452, 464
Joyner, L. P., 115
Jukes, T. H., 286
Jungwirth, C., 375, 376, 381, 382, 384
Jurtshuk, P., 194

K

Kabat, E. A., 285, 293, 294
Kabins, S. A., 159, 160
Kaerner, H. C., 309
Kaesberg, P., 306, 307
Kagami, M., 333
Kagiwada, S., 133
Kaiser, A. D., 394, 395, 453, 455, 457, 463, 464, 468, 476
Kaku, H., 366
Kakuno, T., 184
Kale, K. S., 40
Kalnins, V. I., 401
Kamahora, J., 366, 367, 369
Kameda, M., 142
Kamen, M. D., 181, 182, 183, 184, 185, 186, 191, 192
Kamiya, T., 405, 431, 434
Kamptner, E., 74, 77, 78
Kandler, O., 18, 19
Kane, M. E., 255
Kano, T., 276
Kaplan, A. S., 427-50; 374,

405, 406, 431, 432, 433, 434, 437, 439, 440, 441
Kaplan, N. O., 124, 297, 499
Kára, J., 406, 430, 432, 435
Karfunkel, P., 19
Karpas, A., 432
Kasai, G. J., 253, 254, 255, 263, 264
Kasamaki, A., 441
Katagiri, M., 190
Kates, J. R., 361, 362, 373, 374, 375, 376, 380, 383, 384
Kato, M., 445
Kato, S., 133, 366, 367, 371, 374
Katz, J. J., 17, 19
Katz, M., 398, 415, 444
Kauffmann, M., 113
Kaufman, S., 116, 343
Kaur, J., 247, 254, 255
Kawamatu, S., 35
Kawamura, T., 160
Kayajanian, G., 461, 462, 463
Kaye, A. M., 56, 58, 430, 440, 442
Keech, D. B., 504, 512, 513
Keilin, D., 181
Keir, H. M., 395, 429, 435, 439
Kelemen, M. V., 137, 139, 141, 142, 150, 151, 152
Kellenberger, E., 24, 174
Kellenberger, G., 463, 464, 471, 473, 476
Keller, R., 366
Kellock, A. W., 277
Kellogg, D., 307
Kelly, C., 524, 526, 527
Kelly, D. P., 497, 498, 505, 506, 511, 513
Kelly, R. B., 309, 311, 312, 314, 315, 318
Kelsey, F. E., 7
Kelus, A., 297
Kelus, A. S., 298
Kendall, D., 525
Kennedy, E. P., 116
Kepner, W. A., 1
Kerner, E., 344, 347
Keskin, H., 348
Kessel, M., 103
Kessler, E., 502
Kessler, G., 88, 98, 100
Kesting, F., 205, 236
Ketcham, A. S., 398
Khadre, M. A., 365
Khera, K. S., 419
Khorana, H. G., 306
Kidd, J. G., 415
Kidder, G. W., 115, 116
Kielhöfer, E., 348, 349
Kiesow, L., 492, 506, 507, 508, 509, 514
Kijimoto, S., 195
Kikuchi, G., 193
Kilham, L., 369
Killen, K., 463, 471
Killick-Kendrick, R., 125
Kim, K. S., 365, 370
Kimball, P. C., 482
Kimes, R., 393
Kimura, G., 432, 437
Kimura, K., 132
Kimura, S., 132, 133
Kindel, P., 50
King, A. M. Q., 276
King, H. K., 193
Kinghorn, M., 533
Kingsbury, J. M., 42
Kinosita, R., 273
Kinsel, N. A., 496
Kinsky, S. C., 500
Kirby, H., 120
Kirchner, E., 113
Kir'ialova, E. N., 338
Kirkham, J. B., 228, 229, 235
Kirn, A., 368, 369
Kirschstein, R. L., 396, 414, 418, 419, 445
Kisch, A. L., 400, 408
Kiselevskaya, R. M., 342
Kislev, N., 38
Kit, S., 373, 375, 383, 384, 385, 402, 403, 404, 405, 406, 418, 419, 433, 434, 435, 436, 437, 442
Kitahara, K., 341
Kitahara, T., 398, 401, 402, 431, 432
Kitamura, T., 365, 366, 369
Kiyohara, T., 53, 54, 55, 64
Kjeldgaard, N., 523, 524
Kjellén, L., 431
Klapper, D. G., 365
Klein, G., 292, 415
Klein, R. M., 96
Klemm, L., 159, 160
Klemperer, H. G., 405, 434
Kliewer, W. M., 343
Kluchareva, T. E., 415, 416
Klug, A., 393
Klüver, C., 5
Knaysi, G., 533
Kniazeff, A. J., 371
Knight, B. E., 402, 438
Knight, E., Jr., 500
Knight, S. G., 89, 96, 97
Knolle, P., 318
Knopf, P. M., 289
Kobe, K., 210
Koch, A., 524, 526, 531, 533, 536, 546
Koch, J., 349
Koch, M. A., 393, 396, 412, 418, 438
Kocková, A., 324
Koerner, J. F., 409
Kohler, K., 429, 430, 435, 438
Kok, B., 54
Kolesnikov, V. A., 334
Komarov, A., 214
Konigsberg, W., 307
Konst, H., 61
Kontomichalou, P., 147
Kopka, M. L., 182, 184
Koprowski, H., 396, 400, 419
Korkes, S., 343
Korn, D., 464, 472
Korn, E. D., 93
Kornberg, A., 318, 343, 394, 395
Kornberg, H. L., 52, 502, 512, 513
Koshland, M. E., 285
Kotani, M., 186
Koteles, G. J., 429
Kovalenko, V. I., 348
Koyama, J., 503
Koyama, K., 132, 133
Kozhevnikova, E. G., 334
Kozlova, I. A., 385
Kraemer, P., 401
Kramer, D. D., 72
Krasil'nikova, E. N., 341
Krasna, A. I., 499, 500
Krassner, S. M., 110, 115
Kratz, W. A., 50, 55, 58, 59
Kraus, M. P., 56
Krause, R. W., 42
Kraut, J., 184
Kraybill, H. F., 280
Krebs, H. A., 52
Kreger, D. R., 17, 89, 92, 94, 96, 98
Kreger-Van Rij, N. J. W., 324, 330
Kreil, G., 182, 184
Krogmann, D. W., 49
Kroon, A. M., 125
Krumperman, P. H., 344
Kubinski, H., 395
Kubitschek, H., 520, 524, 526
Kudrjavtsev, V. I., 324, 333, 335
Kuenzler, E. J., 76
Kulik, M. M., 274
Kulkarni, D. R., 250, 261
Kulp, J. L., 511
Kumar, H. D., 25, 42, 56, 60, 61
Kumm, H. W., 9
Kundel, D., 252, 264
Kunev, N., 252, 264
Kunisawa, R., 21, 23

Kunkee, R. E., 323-58; 339, 340, 341, 342, 343, 344, 345, 346
Kunkel, H. G., 284
Kuo, M. J., 97
Kuo, M. S., 279
Kupferstein, D., 77, 78, 79, 82
Kurganova, G. V., 342
Kusai, K., 187, 195
Kusaka, T., 193
Kusel, J. P., 125
Kushida, T., 324, 349
Kuznetsova, G. M., 206

L

LaBrec, D. H., 175
Lacy, S. S., 430
Lafon-Lafourcade, S., 344
Lahav, M., 284
Laho, L., 324, 326, 327, 338
Laipis, P., 393, 412
Lamazou-Betbeber, M., 344
Lamb, C. A., 59
Lambert, L., 456, 464, 471, 472
Lambion, R., 324, 340, 341
Lamport, D. T. A., 93
Lampson, G. P., 220
Lancaster, M. C., 274
Landau, B. J., 419
Landesman, J., 498
Lane, W. T., 444
Lang, N. J., 15-46; 22, 29, 31, 40, 41, 48, 60, 64
Lark, K., 531
Larson, V. M., 419
Lascelles, J., 189
Latarjet, R., 400, 406
Laudelout, H., 193, 491, 492, 504, 506, 507
Lauffer, M. A., 38, 39
Lavine, L. S., 76, 77, 78, 79, 80, 81, 82
Lawn, A. M., 154, 155, 159
Lawrence, J. L., 290
Lazaroff, N., 40, 60, 61, 499
Leak, L. V., 17, 18, 24, 25, 37, 40, 41, 55, 102
Lear, P. E., 77, 78, 79, 82
Leathen, W. W., 498
Lebedev, A. I., 225
Lebek, G., 133, 141, 156, 159
LeBouvier, G., 395
LeBouvier, G. L., 393
Lebovitz, H. E., 285, 287
Lebowitz, J., 393, 412
Lebrun, J., 433
LeBuis, J., 440
Lecal-Schlauder, J., 74, 78
Lechevalier, H. A., 92
Lechevalier, M. P., 92
LeConte, J. R., 500
Lederberg, J., 141, 152, 287
Ledinko, N., 403, 406, 435
Leedale, G. F., 71, 75, 78, 79
Lees, H., 491, 492, 493, 494, 495, 499, 508, 509, 512, 513
Lefkovitch, L., 519
Lefort, M., 17, 18, 19, 20, 22, 23, 24, 40, 41, 58
Le Gall, J., 184, 503
Lehman, J. M., 401, 412, 413, 416
Lehmann, H., 2
Leitch, G. J., 249, 252, 253, 258, 262
Lemma, A., 115
Lenhoff, H. M., 124, 499
Lennarz, W. J., 57
Lennox, E. S., 284, 285, 289, 292, 297, 298
Lenon, J., 289
Leonard, M. R., 290
LePage, G. A., 505
Le Page, R. W. F., 114, 125, 126
Lester, R. L., 501
Leunen, J., 211
Levchenko, L. A., 16, 37
Levchenko, T. N., 334
Levi, C. P., 269, 274, 276, 277
Levin, E., 57
Levin, H. L., 116
Levin, J., 307
Levine, A. J., 429, 431, 440
Levine, B. B., 290, 299
Levine, M., 464
Levine, S., 382
Levinthal, J. D., 396, 397, 401
Levintow, L., 305, 309
Levisohn, S., 125
Levitt, J., 62, 432, 439
Levy, B., 398
Levy, J. P., 398, 412
Lewin, R. A., 39, 48, 57, 58, 63, 77
Lewis, A. M., Jr., 398, 401, 416, 444
Lewis, G. W., 252
Lewis, M. J., 133, 134, 135, 136, 137, 138, 139, 143, 146, 147, 148, 150, 151, 156, 157, 158, 159, 160, 162, 166, 167, 169, 170, 175
Libonati, M., 312, 317
Licciardello, G., 455
Lie, J. L., 280
Lieb, M., 471, 472, 474
Liedke-Kulke, M., 468
Lightbody, J. J., 49
Lijinsky, W., 274, 275, 276
Lilleho, E. B., 276
Lin, J.-Y., 307
Linday, E. M., 501
Lindberg, B., 89, 100
Lindberg, M., 116
Lindemann, J., 365
Lindgren, W., 525
Linko, P., 50
Linnane, A. M., 188
Lipman, C. B., 63
Lipmann, M. B., 382, 385
Lippman, E., 93, 104
Lipton, A., 457
Little, P. A., 112
Littlefield, J. W., 404, 437
Lizotte, C. L., 501
Llaguno, C., 329, 333
Llinca, P., 337
Lloyd, B., 344
Lockhart, W. R., 341
Lodder, J., 324, 330
Loddo, B., 384, 385
Lodish, H. F., 307, 311, 312, 314, 315, 316, 318
Loeb, T., 153
Loeblich, A. R., Jr., 71, 72
Loeffler, F., 202
Loh, P. C., 384, 385
Lohmann, H., 74, 78
London, J., 52, 53, 55, 497, 513, 514
Lorenz, R. J., 217
Lotka, A., 527
Lotmar, W., 94
Lovelock, J. E., 113
Lovett, J. S., 102
Lübke, A., 208, 215
Lucam, F., 211
Lück, E., 349
Luftanova, A. D., 334
Luftig, R., 25, 38
Luke, H. H., 269, 277, 278, 279
Lumsden, W. H. R., 110
Lundgren, D. G., 498, 499, 512
Luria, S. E., 465
Lurie, M., 290, 292
Lüthi, H., 323, 324, 340, 341, 345, 347, 349
Lüthi, H. R., 334
Lwoff, A., 123, 174
Lwoff, M., 115, 116, 123
Lycke, E., 362
Lynch, V., 22
Lynen, F., 192, 193
Lyng, J., 258, 259
Lyric, R., 493, 494
Lythgoe, J., 102

M

Maaløe, O., 523, 524, 531, 532
Maass, G., 430, 432, 442
McAllister, R. M., 397, 399
McAuslan, B. R., 360, 361, 362, 368, 373, 374, 375, 376, 377, 380, 381, 383, 384
McBride, R. A., 292
McBride, W. D., 397
Maccacaro, G. A., 157
McCarthy, B. J., 298, 299, 394
McClain, M. E., 368, 370, 377
McClary, D. O., 102
McCoy, S., 192
McCrea, J. F., 362, 385
McCutchan, J. H., 399
McDevitt, H. O., 299
McDonald, E. M., 247
McFadden, B. A., 500, 512, 513
McFarland, W., 291
MacFarren, A. C., 151
McGill, S., 76, 77
McGregor, D. D., 300
MacHattie, L. A., 393, 457, 476
Machlis, L., 88, 95, 96, 101
Maciag, W. J., 512
McIntire, K. R., 286
McIntyre, A., 72, 75, 78, 79
Macintyre, E., 411
McKercher, P. D., 61, 207, 212, 213, 226, 236, 237
Mackowiak, C., 212
McLachlan, J., 50, 59, 75
McLean, A. E. M., 273, 275
McLean, E. K., 273, 275
Maclean, F. I., 49
McMacken, R., 464
McMichael, H., 412
McMurrough, I., 100, 103
MacNeal, W. J., 112
MacPherson, I., 395, 396, 397, 399, 410, 412, 413
MacPherson, I. A., 411
McSwain, B. D., 49
McVicar, J. W., 207, 208
Madhavan, T. V., 275
Madison, J. T., 306
Madoff, M. A., 259
Madsen, M. J., 21, 22, 31, 33, 36, 37, 40, 41
Mage, R. G., 293
Magee, W. E., 375, 382, 385
Magne, F., 72, 73, 78
Magnusson, B., 260
Mahadevan, P. R., 88, 89, 96, 97, 99, 100
Maisel, J. V., Jr., 393, 412
Maitland, H. B., 216
Maitland, M. C., 216
Maizel, J. V., 307
Maizel, J. V., Jr., 438
Majumder, S. K., 270
Makawi, M., 247
Mäkelä, O., 292, 300
Makino, K., 160
Malan, C. E., 324, 328, 337, 347
Malavolta, E., 492, 494, 507, 512
Malhotra, M. N., 125
Malmgren, R. A., 398, 443
Malmquist, W. A., 207, 212
Malone, M. F., 112
Maloof, R., 414
Mammerickx, M., 211
Manasas, W. F. O., 277
Mandel, M., 125, 144, 443
Mandell, C., 77, 79
Mandeville, S. E., 17, 19
Mangum, J. H., 183, 194, 498
Manly, K. F., 456, 461, 464, 465, 467, 481
Mann, P. G., 160
Manners, D. J., 98
Mannheim, W., 492
Mannick, J. A., 291
Mannik, M., 284
Manocha, M. S., 88, 98, 102
Mansa, B., 155
Mantani, M., 371
Manton, I., 71, 75, 78, 79
Marbrook, J., 270, 292
Marchalonis, J., 289, 290
Marchant, R., 96, 101, 102, 103
Marchelli, C., 468
Marcilla Arrazola, J., 329, 353
Marcus, P. I., 402
Margalith, P., 498
Margoliash, E., 181, 182, 183, 184
Marin, G., 406, 407, 408, 440, 441
Markali, J., 78, 79
Market, C. L., 296
Markushin, S. G., 218, 220
Marler, J. E., 50, 63
Marmol, F. R., 365
Marmur, J., 118, 125, 126, 144, 145, 174
Marquardt, J., 362
Marques Gomes, J. V., 329, 344, 345
Marquissee, M., 306
Marr, A. G., 519-48; 519, 524, 531, 533, 534, 535, 536, 537
Marrè, E., 62
Marshall, H. G., 77
Marshall, R., 307
Martakov, A. A., 334
Martensson, L., 297
Marth, E. H., 280
Martin, A. R., 263
Martin, E. M., 305, 309
Martin, H. H., 18, 19, 20, 58
Martin, L., 524, 525
Martin, M., 324
Martin, S. J., 229, 231, 232, 233
Martin, W. B., 205, 212, 213, 214
Martinez, H., 539
Martinez-Palomo, A., 440
Martini, A., 328, 329
Martinsen, J. S., 217, 226
Marucci, A. A., 204
Masharina, L. V., 385
Massa, D., 226
Masters, R. C., 217
Matheka, H. D., 223, 224, 225, 227, 228, 229, 230, 235
Mathewson, J. H., 186, 187
Mathieson, A. McL., 270
Matile, P., 38
Matsubara, H., 195
Matsubara, K., 468
Matsumoto, S., 366, 367
Matsushiro, A., 461, 462
Matsuyuki, Y., 290
Mattern, C. F. T., 125
Matthews, R. E. F., 270, 271, 273
Maugini, E., 29, 31, 35, 36
Maul, W., 349
Maurer, L., 57
Maurer, P. H., 299
Maximow, A. A., 6
May, P., 428
Mayer, K., 338, 339, 349
Mayeux, P. A., 58
Mayhew, J. N., 146, 148, 157
Mayr, A., 219, 227, 235
Mazia, D., 121
Mazza, G., 184
Mechalas, B. J., 502
Medawar, P. B., 290
Medenwald, H., 349
Medina, D., 395, 396, 408, 410, 413
Meeuse, B. J. D., 29
Meezan, E., 411
Mehler, A. H., 343
Mehlitz, A., 349
Mehlman, B., 113

Mehta, S. C., 17
Meier, H., 102
Mekori, T., 292
Melamed, N., 341, 342
Melas-Joannidis, Z., 330
Melling, J. W., 285
Melnick, J. L., 392, 393, 398, 401, 402, 403, 404, 405, 415, 419, 428, 431, 432, 436, 442, 443, 444
Melnikova, L. A., 385
Menke, W., 21, 22
Menninger, J. R., 471, 475
Menninger, L., 471, 475
Menzel, D. W., 77
Mercer, F. V., 17, 19, 21, 22, 23, 35, 40, 41
Merigan, T. C., 380, 382, 383, 402
Merrill, S. H., 306
Merrill, T. G., 261
Meselson, M., 455, 456, 471, 475, 484
Meskhi, A., 324, 340, 341
Metzenberg, R. L., 100
Metzger, H., 284
Metzner, I., 16, 17, 18, 19, 20, 35
Metzner-Kilshner, I., 19, 24, 36
Meyer, H., 18, 19
Meyer, K. H., 94
Meyer, T. E., 186, 187
Meynell, E., 153, 154
Meynell, G. G., 154, 155, 159
Michel, M., 298
Michel, M. R., 394, 415, 432, 440, 441, 442
Michell, A. J., 89
Mickelson, J. C., 40
Milder, R., 123
Miles, P. G., 96
Milhaud, G., 496, 497, 505, 511, 512
Mill, P. J., 100
Miller, J. J., III, 290
Miller, M. M., 31, 41
Miller, M. W., 57, 98, 330, 335
Miller, O. V., 375, 382
Miller, P. A., 193
Millet, J., 496, 497, 505, 511, 512
Millitzer, W. E., 193
Mills, D. R., 316, 317
Mills, R. C., 194
Milstein, E., 288
Mims, C. A., 371
Minárik, E., 324, 326, 327, 328, 335, 338
Minna, J. D., 296, 297
Mishell, R. I., 292
Mitchell, C., 48
Mitchell, J., 300
Mitchell, P., 509
Mitchell, R., 93, 96
Mitchell, T. G., 259
Mitchison, J., 533
Mitchison, N. A., 291, 300
Mitra, S., 306
Mitri, S., 262
Mitsuhashi, S., 133, 142, 147, 160
Mittelman, A., 436
Miyake, M., 276
Miyamoto, H., 371
Miyamoto, J., 367, 374
Mizushima, S., 194
Mjaaland, G., 75, 76
Moger, J. C., 334
Mohide, P. T., 474
Mohler, J. R., 206
Möhlmann, H., 204, 211
Molina, A. M., 156
Moller, F., 296
Monod, J., 519, 539
Monsour, A. M., 291
Montagnier, L., 309, 393, 399, 400, 406, 412, 413
Montague, T., 262
Montemartini, A., 324, 334, 336
Moody, E. E. M., 151, 467
Moohr, J. W., 309
Moor, H., 20, 102
Moore, B. G., 58
Moore, D. H., 367
Moore, E. W., 259
Moore, K. E., 125
Moore, L., 465, 479, 480, 481
Moore, M., 405, 436
Moore, M. S., 365
Moore, R. B., 52, 53, 55, 57, 58, 61
Moorhead, J. F., 291
Moorhead, P. S., 396, 412, 413
Morgan, C., 367, 378, 438, 439
Morgan, D., 236
Morgan, H. R., 400
Morgenroth, A., 159, 160
Mori, R., 432, 437
Mori, T., 185, 190, 191, 502
Morita, S., 183, 186
Morris, H. J., 54
Morris, I., 17, 48, 58
Morris, M. E., 38, 39, 63
Morrison, J. M., 395, 429, 434, 435, 439
Morrison, M., 191
Morrow, A. W., 211, 212, 226
Mortenson, L. E., 52
Mortimer, P. H., 270, 271, 272, 273, 277
Morton, R. K., 188
Moscovici, C., 367
Moses, V., 50
Mosiashvili, G. I., 337, 338
Mosier, D. E., 290, 292
Mosko, M. M., 291
Mosley, W. H., 257, 262, 263, 264
Moss, M. L., 77, 78, 79, 82
Moss, M. O., 276, 277
Moss, T. H., 186
Mossman, M. R., 165
Motalev, S. V., 334
Motokawa, Y., 193
Moulder, J. W., 6
Mousa, A. H., 262
Mousset, S., 463, 470
Mowat, G. N., 211, 214, 217, 219
Mowbray, J. F., 291
Mower, H. F., 52, 500
Moyer, A. W., 396
Mühlethaler, K., 20, 92
Muhlfordt, H., 126, 127
Mukerjee, S., 256, 262
Mukherjee, B., 254
Mulczyk, M., 155, 159
Mullens, R., 23
Müller, G., 361, 364
Mulligan, F. J., 29
Mulligan, H. W., 5, 6
Mullins, J. T., 102
Munk, K., 440, 442
Munro, A. J., 289
Muntoni, S., 384
Munyon, W. H., 373, 375
Munyon, W. M., 432
Murano, F., 49
Murata, Y., 138
Murphy, A. M., 270
Murray, E. G. D., 324, 340, 341, 346
Mussgay, M., 221, 225, 229, 237
Musteikis, G. M., 251, 252, 258
Mutch, G. V., 273
Myers, B. R., 112
Myers, J., 49, 50, 53, 55, 58, 59

N

Nadler, K. D., 183
Naegele, R. F., 444
Nagai, Y., 160, 503
Nagata, Y., 332
Nagington, J., 361, 364
Nagler, C., 309
Nagyová, M., 327
Naide, Y., 160
Naik, M. S., 502

Nakada, D., 308
Nakagawa, A., 341
Nakai, M., 187
Nakamura, A., 138, 145, 146
Nakamura, I., 276
Nakaya, R., 138, 145, 146
Nakayama, T., 187
Nankiville, D., 185
Narahashi, Y., 349
Narasimham, K. S., 270
Nardelli, L., 210, 211, 216, 217
Nason, A., 193, 194, 491, 492, 493, 494, 499, 502, 504, 506, 507, 514
Nasuniya, N., 260
Nathan, H. A., 116, 343
Nathans, D., 308
Navara, A., 324, 325, 326
Neff, B. J., 364
Nel, E. E., 331, 335
Nelson, N., 101, 102, 103
Nelson, R. R., 278
Nemes, M. M., 385
Neptune, E. M., 259
Neu, H., 349
Neumann, N. P., 185
Neurath, H., 286
Neva, F. A., 112
Newcomb, R. W., 290, 291
Newman, J. F. E., 237
Newton, A. A., 364
Newton, B. A., 109-30; 115, 116, 117, 119, 123, 125, 126
Newton, J. W., 181
Newton, N., 193, 195
Nezlin, R. S., 284
Nicholas, D. J. D., 52, 124, 193, 491, 493, 494, 495, 499, 502, 507, 508, 509, 512, 513
Nichols, B. W., 57
Nichols, R. E., 277
Nicholson, B. H., 276
Nickerson, W. J., 88, 89, 92, 94, 95, 98, 99, 100, 101, 102, 104
Niederpruem, D. J., 193
Niikawa, Y., 349
Niklowitz, W., 17, 20, 22, 31, 33, 36
Nilausen, K., 413
Nilson, E., 519
Nirenberg, M., 307
Nisbet, N. W., 293
Nishibayashi, H., 190
Nishida, H., 133, 153
Nishikawa, K., 184
Nishimura, C., 362
Nishimura, M., 186
Nishimura, S., 278
Nishiyama, K., 133
Nishmi, M., 366
Nisonoff, A., 297
Niu, M. C., 291
Niveleau, A., 428
Nizamuddin, Md., 368
Noguchi, H., 116
Nohara, H., 434
Nomoto, M., 349
Nonomura, H., 333, 341
Nooney, G., 527, 539
Nordin, J. H., 97
Nordli, E., 78, 79
Norman, A. G., 97
Norrby, E., 438
Norris, H. T., 250, 251
Norris, L., 50
Norris, R. E., 50, 74
Northcote, D. H., 92, 93
Norton, J., 57
Nossal, G. J. V., 290, 292, 300
Novaes-Ledieu, M., 89, 93
Novick, A., 539
Novy, F. G., 112
Nowell, P. C., 412
Noyes, W. F., 361, 364, 396
Nozu, K., 316
Nultsch, W., 19, 61
Nuñes, J. M., 367
Nuñes Petisca, J. L., 367
Nussenzweig, V., 292
Nye, S. W., 250, 264
Nykanen, L., 334

O

O'Brien, R. W., 91, 96
Ochiai, K., 132
Ochoa, S., 305, 306, 308, 313, 316, 317, 343
O'Colla, P. S., 17
Oda, K., 379, 380, 381, 382, 384
Oda, M., 364, 370
Oda, T., 193
Oeschger, M. P., 308
Ogata, C., 133, 153
Ogawa, H., 457
Ogawa, K., 397
Ogawa, M., 367, 374
Ogino, T., 403, 435
Ohama, H., 51
Ohara, Y., 333, 341
ÓhEocha, C., 58
Ohkata, Y., 316
Ohmori, M., 397
Ohnishi, T., 502
Ojeda, A., 299
Oka, T., 193
Okada, Y., 418, 419
Okamoto, S., 147
O'Kelly, J., 274, 275
Okunuki, K., 181, 187, 192, 195
Old, L., 194
Oldfield, D., 519
Olenov, J. M., 291
Oleson, J. J., 112
Oliinik, M. K., 203
Olins, D. E., 284
Olitsky, P. K., 207
Olshevsky, U., 432, 439
Olson, J. M., 183, 186
Omori, M., 343
Omura, T., 190
O'Neill, C., 411
Ono, K., 371
Onufriev, V. P., 206
Orlando, J. A., 190
Orme, S. K., 414
Ormerod, W. E., 120
Ørskov, F., 155
Ørskov, I., 155
Orth, G., 405, 436, 437
Ortigoza, R. O., 36
Osato, T., 392
Oseasohn, R., 262
Oshiro, L. S., 438, 439
Ossovski, L., 413, 442
Osteen, O. L., 207, 212
Osterhout, S., 385
Ota, A., 502
Otsuka, J., 186
Otsuka, K., 341
Oudin, J., 297, 298
Ough, C. S., 334, 345, 348, 349
Ovary, Z., 293
Overby, L. R., 306
Overrein, L., 493
Owens, O. V., 54
Oxman, M. N., 402, 403, 406, 407, 442, 444
Oza, N. B., 250, 251, 258, 261
Ozeki, H., 133, 155, 158
Ozino, O. I., 324

P

Paasche, E., 71-86; 74, 75, 76, 77, 78, 80, 81, 82, 83
Pace, N. R., 233, 316, 317, 318
Packchanian, A., 112
Packer, L., 115, 116, 500, 501
Packman, S., 464, 472
Padan, E., 38
Padgett, B. L., 363, 368, 385
Pagano, J. S., 399
Painter, P. R., 519-48; 524, 531, 533, 534, 535, 536, 537
Palacios, C. A., 214
Palmer, G., 189, 495
Palmer, J. G., 274
Palmer, L., 396
Panina, G. F., 210, 211,

216, 217
Pankratz, H. S., 18, 19, 21, 25, 29, 31, 33, 35, 61
Panse, M. V., 250, 251, 261, 262
Paoletti, C., 125
Paoletti, E., 373
Pappenheimer, A. M., 193
Paraf, A., 213, 214
Parent, G., 112
Parfent'ev, L. N., 348
Park, R. B., 37
Parke, M., 71, 72, 73, 74, 75, 77, 78
Parker, B. C., 92, 93
Parker, P. L., 57
Parkhouse, R. M. E., 289
Parkinson, J. S., 456, 464
Parks, J. H., 186
Parks, W. P., 428
Parle, J. N., 332
Parpia, H. A. B., 270
Parsons, D. F., 47
Parsons, T. R., 57
Passen, S., 405, 414
Patterson, E. L., 116
Patterson, J. C., 98
Patty, R. E., 217, 218, 219, 221, 223, 224, 229
Patzschke, K., 349
Paul, F. J., 443
Paul, W. E., 292, 300
Pauli, O., 349
Pauling, L., 296
Paulson, D. F., 414
Pautrizel, R., 125
Pay, T. W. F., 214
Payne, F. E., 384
Pearce, J., 52, 55
Pearce, J. D., 292
Pearson, L. C., 24
Peary, J. A., 62
Peat, A., 37, 38, 40, 41, 42, 61, 103
Peck, H. D., Jr., 489–516; 184, 495, 496, 497, 498, 500, 502, 503, 504, 507, 510, 511, 513
Peck, H. M., 276
Peck, R., 344
Pederson, C. S., 341, 344
Peña, A., 260
Penman, S., 307
Penswick, J. R., 306
Pepper, R. E., 194
Pereira da Silva, L., 456, 461, 464, 471, 472, 475, 480
Pereria, H. G., 416, 431, 438
Perham, R. N., 286
Peries, J., 402
Perkins, E. H., 290
Pernis, B., 292, 298
Perras, J. P., 76
Perret, C., 519
Perret, D., 137
Pestka, S., 307
Petermann, H. G., 212
Peters, D., 361, 364
Peters, J. A., 272
Peterson, O. P., 385
Peterson, R. L., 317
Peterson, W., 397
Peterson, W. H., 97
Peto, S., 212
Pett, D., 375
Pettersson, U., 438, 439, 440
Péturs son, G., 406, 430, 432
Peynaud, E., 323, 324, 328, 331, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 347, 349
Pfau, C. J., 362
Phaff, H. J., 88, 98, 330, 335
Phelps, H. L., 275
Philipson, L., 218, 219, 221, 222, 438, 439, 440
Phillips, R. A., 258
Philp, J. McL., 274
Picci, G., 330, 335, 337
Piccinin, G. L., 157
Pichinoty, F., 492, 502
Piekarski, L. J., 375, 384, 403, 405, 434, 435, 436, 442
Pierce, N. F., 255, 256, 262
Pikálek, P., 25, 61
Pilarski, L., 452
Pilone, G. J., 340, 344, 345
Piña, M., 375, 393, 394, 428, 435
Pinter, I. J., 59, 75, 76, 77
Pipkin, A., 112
Pirsch, J. B., 365, 366
Pitelka, D. R., 123
Pittam, M. D., 113
Pittman, M., 260
Pitton, J.-S., 137, 139, 141, 142, 146, 148, 150, 151, 152, 157
Pitts, J., 411
Piyaratn, P., 246
Pizzi, A., 10
Pizzi, T., 5, 8
Planterose, D. N., 232, 234, 235, 362
Plaut, W., 64
Pledger, R. A., 218, 219, 223, 232
Plescia, O., 299
Plowright, W., 364, 365
Poittevin, M. E., 340
Pokallus, R. S., 193
Polasa, H., 438, 439
Polatnick, J., 211, 217, 224, 226, 227, 228, 229, 231, 232, 233, 234, 235, 236
Poljansky, G., 29
Pollet, R., 318
Politzer, R., 246, 249, 255, 256, 262
Ponomareva, R. V., 334
Pons, M., 309
Ponten, J., 396, 411, 419
Pope, J. H., 397
Poppensiek, G. C., 215
Portalier, R., 222
Porter, C. A., 103
Porter, R. R., 293, 294
Postgate, J. R., 184, 502, 503
Potgieter, H. J., 89, 96, 97, 98
Potter, M., 285
Potts, J. T., Jr., 414
Poulik, M. D., 293
Powell, E., 521, 526, 531, 533, 534, 535, 536
Powell, S. S., 363, 374
Prakash, G., 42
Pramer, D., 193
Prasad, R., 58
Prauser, H., 21
Prehn, R. T., 413
Prell, H., 471
Prendergast, R. A., 284
Preobrazhenskii, A. A., 334
Prescott, D., 526, 533
Pressman, D., 284
Preston, R. D., 92, 93
Preston, R. E., 364
Pribnow, J. F., 291
Price, P. J., 397
Prigge, K. O., 398, 444
Prillinger, F., 348, 349
Pring, M., 400
Pringle, C. R., 208, 218, 219, 220
Pringle, R. B., 269, 277, 278, 279, 280
Pringsheim, E. G., 19, 37, 72
Protass, J. J., 464, 472
Provasoli, L., 59, 71, 75, 76, 77
Prunet, P., 218, 219
Prusoff, W. H., 385
Prydie, J., 214
Ptashne, M., 452, 453, 464, 471, 472, 473
Pugh, W. E., 398, 443
Punnett, T., 58, 93
Purlson, E. H., 365, 366
Putnam, F. W., 285, 286
Pyl, G., 207, 208, 211, 222, 224, 229, 235

Q

Quastel, J. H., 492
Quayle, J. R., 504, 512, 513

R

Rabinowitch, E., 58
Rabinowitz, J. C., 503
Rabson, A. S., 396, 398, 409, 414, 443
Rachmeler, J., 147
Racker, E., 47
Radding, C. M., 456, 457, 461, 464, 465, 467, 468, 472, 474, 481
Radler, F., 324, 339, 340, 341, 342, 343, 344
Radloff, R., 126, 393, 412
Radzimski, G., 284
Rae, P. M. M., 22
Rahman, A. S. M. M., 262
Rahn, O., 524, 526, 527
RajBhandary, U. L., 306
Rakcsányi, L., 324
Ralph, B. J., 91, 96
Ramaiah, A., 494, 507
Ramirez, C., 335
Ramkrishna, D., 519, 527
Ramm, G. M., 248
Ramyar, H., 224
Ranby, B. G., 92
Randall, C. C., 363, 365, 367, 374
Randrup, A., 229, 235
Rankine, B. C., 332, 337, 338, 340, 349
Ranlett, M., 184
Rao, P. S., 512, 513
Raper, K. B., 92
Rapp, A., 339
Rapp, F., 392, 398, 401, 415, 419, 431, 432, 443, 444
Raska, K., Jr., 299
Ratcliffe, F. N., 371
Ratner, S., 10
Ravdin, R. G., 396
Ray, H. N., 125
Rayns, D. G., 73
Razzell, W. E., 499
Read, J. K., 248, 257, 263, 265
Redfearn, E. R., 185, 194, 195
Rees, K. R., 273, 275
Rees, M., 494
Reeve, E. C. R., 149
Rehm, H.-J., 348
Reich, E., 308
Reich, P. R., 394, 398, 417, 430, 431, 443
Reichenow, E., 112
Reid, M. R., 55
Reisfeld, R. A., 293, 297
Reisner, A. H., 364
Reissig, M., 431
Rembold, H., 116
Repaske, R., 500, 501
Rethalier, A., 349
Reyes, E., 88, 89, 94, 95, 100, 101
Reyes, V., 246, 264
Rhodes, J. M., 290
Ribeiro, L. V., 112
Ribéreau-Gayon, J., 324, 335, 337, 338, 339, 342, 343, 344, 347
Ricceri, G., 404, 436
Rice, C. E., 204
Richardson, C. C., 463
Richardson, J. P., 394
Richardson, S. H., 250, 258
Richelson, E., 308
Richmond, M., 534
Richter, G., 57
Rifkind, R. A., 367
Riklis, E., 499, 500
Riley, F. L., 125, 126
Riley, J. P., 76
Rimington, C., 272
Ringel, J., 438, 440
Ringhertz, N., 439
Riou, G., 125
Ris, H., 17, 18, 20, 22, 24, 25, 29, 31, 33, 55, 64, 457
Ristic, M., 113
Rittenberg, D., 10, 499, 500
Rittenberg, S. C., 497, 502, 514
Rivat, L., 289
Rivenson, S., 211, 217, 226
Roane, P. R., Jr., 433
Robbins, P. W., 411, 510
Roberts, J. A., 371
Roberts, J. W., 307, 308
Robertson, A., 61
Robertson, J. A., 276
Robertson, J. D., 22
Robertson, M., 120, 121, 123
Robinson, F. V., 277
Robinson, W. A., 292
Robinson, W. S., 319
Roblin, R. J., 307
Rodriguez-Burgos, A., 364, 377
Rofe, J. C., 270
Rogers, S., 405, 436
Rogers, T. D., 63
Rogosa, M., 340
Roholt, O. A., 284
Roizman, B., 432, 433, 438, 444
Rokugo, M., 133
Romanko, R. P., 278, 279
Romano, A. H., 92
Ronaldson, J. W., 270, 271
Rondle, C. J. M., 364, 384
Ropartz, C., 289
Rose, A. H., 100
Rose, H. M., 367, 378, 438, 439
Rose, J. A., 394, 395, 428, 430, 443
Roseman, S., 97
Rosén, C.-G., 349
Rosenkranz, H. S., 147, 378
Rosinski, M. A., 94, 96
Ross, J., 375
Roth, J. S., 57
Rothberg, S., 405
Rothman, J. L., 455, 458, 460, 466
Rottman, F., 307
Rouhandeh, H., 366
Roumiantzeff, M., 212
Rouse, H. C., 398, 409, 439
Rowe, A. J., 284
Rowe, D. S., 283
Rowe, W. P., 364, 396, 397, 398, 399, 401, 402, 403, 407, 409, 414, 416, 417, 418, 443, 444
Rowley, D., 252
Rownd, R., 126, 145, 146, 174
Roychandhury, P. K., 260
Rozwodowska-Dowzenko, M., 132
Rubenstein, I., 459, 472
Rubin, B., 398, 409
Rudra, B. C., 262
Rudzinska, M. A., 115, 126
Rueckert, R. R., 306, 307
Ruiz-Herrera, J., 88, 89, 96, 97
Ruschmann, G. K., 432, 440, 441, 442
Russell, D. W., 96, 101, 270
Russell, G. R., 270
Russell, W. C., 402, 431, 438
Ruttenberg, G. J. C. M., 125
Rutter, W., 295
Rutter, W. J., 52
Ryan, J. R. C., 235
Rybtchine, V., 455, 458
Ryley, J. F., 113, 121, 122, 124
Ryter, A., 24
Ryther, J. H., 51, 72, 75
Rzedowska, H., 338
Rzedowski, W., 338
Rzhanova, G. N., 57

S

Saad, A., 257, 263, 264

Saavedra, I. J., 334
Sabar, N., 93
Sabin, A. B., 396, 418
Sachs, L., 392, 395, 396, 406, 407, 408, 410, 413, 430, 431, 441, 442, 443
Sack, R. B., 255, 256, 258, 262
Saenko, N. F., 333, 334, 342
Safferman, R. S., 38, 39, 53
Sagan, L., 64
Sagers, R. D., 500
St. Rose, J. E. M., 300
Saito, M., 276
Saito, Y., 193
Sakharova, T. A., 333, 334
Saksela, E., 396, 412
Salb, J. M., 402
Salganik, R. I., 385
Salomon, R., 56, 58
Salton, M. R. J., 23
Salvi, M. L., 406, 442
Salzman, L. A., 457, 475
Salzman, N. P., 362, 374, 377, 380, 382, 383, 384, 402, 409
Salzman, T. C., 159, 160
Samaddar, K. R., 278
Samaille, J., 438, 440
Sambrook, J. F., 367, 368, 377, 385
Samper, L., 398
Sanarelli, G., 261
Sandeen, G., 317
Sanders, F. K., 309
Sanders, J., 367
Sanderson, P. J., 431, 438
Sanford, K. K., 392
San Pietro, A., 47, 500
Santer, M., 495, 512
Santero, G., 211
Santo, R., 49
Sargeant, K., 274
Sargent, J. R., 121, 122, 124
Sarles, M. P., 6
Sarov, I., 362, 363
Sarycheva, O. F., 400, 445
Sasagawa, M., 187
Sašarman, A., 146, 159, 160
Sasu, D., 159, 160
Sato, R., 184, 185, 188, 189, 190, 103, 502
Sato, S., 133, 153, 156
Satoh, P. S., 405
Sauer, G., 400, 407, 440, 442
Sautière, P., 438, 440
Savan, M., 204, 226, 229, 235
Sawada, O., 132
Sawai, T., 147
Sawyer, B., 271, 272, 273
Scaife, J., 146, 452, 462, 467
Scardovi, V., 348
Scarletta, L., 420
Schaechter, M., 523, 524, 526, 531, 533, 536, 540
Schafer, D., 252
Schäfer, W., 306
Schaffer, F. L., 306
Schanderl, H., 323, 331, 333, 336, 337, 343
Schechter, I., 300
Scheffer, R. P., 269, 277, 278, 279, 280
Schejter, A., 181
Schell, K., 371, 444
Scherrer, R., 368, 369
Schierman, L. W., 292
Schiff, J., 60
Schiff, J. A., 56, 64
Schildkraut, C. L., 125, 126, 144, 145, 174
Schiller, E. L., 115
Schiller, J., 74
Schindler, A. F., 274
Schivo, M. L., 384, 385
Schlegel, H. G., 501
Schlesinger, R. W., 398, 439
Schlichting, H. E., Jr., 63
Schlossman, S. F., 293, 294
Schlumberger, H. D., 393, 412, 438
Schmid, K., 291
Schmidt, H.-L., 341, 343
Schmidt, S., 210
Schmitt, A., 339
Schmitz, R., 22, 23
Schneider, H., 175, 252, 264
Schneider, I. R., 38
Schnepf, E., 20, 21, 22, 23, 37
Schneweis, K. E., 432
Schoening, H. W., 207
Schoental, R., 274, 275, 276, 280
Scholand, J., 291
Scholes, P., 193
Scholes, P. B., 193
Scholes, V. E., 63
Scholtens, R. T., 156
Scholtissek, C., 305
Schonheimer, R., 10
Schreffler, D. C., 472, 474
Schroeter, L. C., 348
Schulman, M., 52
Schultz, R. B., 405, 414
Schulz, G., 18, 19
Schussin, B., 72, 73
Schwartz, M., 471, 475, 477, 483
Schwarz, E., 73
Schwerdt, C. E., 363
Schwöbel, W., 217
Scott, F. W., 206, 218
Scremin, L., 123, 125
Scurfield, G., 89
Seaman, G. R., 260
Sebring, E. D., 377, 380, 382, 383, 384, 402, 409
Séchaud, J., 24
Seegal, B. C., 367
Seeliger, H. P. R., 91, 99
Segura, M., 211, 217
Sekijima, Y., 155
Sela, M., 284, 299, 300
Sell, S., 283
Sellers, R. F., 205, 216, 218, 221, 225
Sells, L. L., 366
Sen, A., 252
Senez, J. C., 495
Sening, E., 348
Sentheshanmuganathan, S., 98
Septilici, G., 348
Seward, C., 501
Seyffert, R., 192, 193
Shachanina, K. L., 415
Shafia, F. M., 194, 498, 499, 507
Shafy, A., 205, 236
Shahan, M. S., 203, 206, 207, 210, 213
Shakhsuvaryan, A. V., 333, 334
Shannon, J. S., 270, 271
Shapiro, J., 455, 456, 459, 462, 468, 479
Shapiro, L., 316
Sharon, N., 439
Sharp, D. G., 365, 370, 383
Sharp, J. A., 291
Sharpe, M. E., 340
Shatkin, A. J., 22, 308, 377, 378, 380, 382, 383, 384, 385, 428
Shaw, J. J., 121, 122
Shaw, M., 102
Shaw, V. W., 147
Shearer, M., 411
Shedden, W. I. H., 405, 433, 434
Sheek, M. R., 435
Shein, H. M., 396, 397, 412
Sheinin, R., 396, 400, 404, 406, 418, 435, 436, 440, 441, 442
Shepherd, W. H., 429, 439
Sheridan, A., 274
Shestakov, S. V., 50
Shethna, Y. I., 185
Shields, L. M., 48, 51, 56
Shifrine, M., 88, 330, 335
Shikata, T., 273

Shilo, M., 38, 62, 63, 64
Shimatani, Y., 332
Shimkin, M. B., 280
Shimojo, H., 416
Shimura, Y., 118, 308
Shimwell, J. L., 346
Shinoda, T., 285
Shipkey, F. H., 433, 438
Shoji, K., 193
Shorland, F. B., 272
Short, W. A., 55
Shotwell, O. L., 269
Shrivastav, J. B., 247
Shrivastava, D. L., 249, 260, 262
Shug, A. L., 193, 494
Shugarman, P. M., 39
Shulman, M., 474
Shur, I. M., 342
Shymala, G., 291
Sibalin, M., 218
Siebold, H. R., 203, 218, 219, 237
Siegelman, H. W., 58
Siegert, R., 433, 438
Sigel, M. M., 290, 417
Signer, E. R., 451-88; 455, 456, 458, 461, 462, 464, 465, 467, 468, 473, 474, 479, 480, 481, 482
Silver, M., 495, 496, 498
Silver, W. S., 492, 504
Silverman, M. P., 498, 499
Silverman, M. S., 291
Siminovitch, L., 367, 410, 413, 456, 464, 471, 472, 474
Simkiss, K., 81
Simmons, E. L., 7
Simon, E. H., 309
Simon, L., 316
Simonsen, M., 293
Sinclair, D. P., 273
Sinclair, P., 193, 194, 195
Singer, S. J., 285, 293
Singh, H. N., 41, 42
Singh, P. K., 63
Singh, R. N., 17, 18, 20, 22, 24, 25, 29, 31, 33, 55, 63
Singh, S., 184
Sinha, R., 25, 262
Sinsheimer, R. L., 306, 309, 311, 312, 314, 315, 318, 457
Siskind, G. W., 300
Sjögren, H. O., 396, 412, 415
Skalka, A., 457, 464, 472, 476, 477, 480
Skinner, H. H., 213
Skipper, H. E., 55
Skoog, F., 50, 52, 56, 58, 59
Skucas, G. P., 89, 95, 96, 101
Skujins, J. J., 96, 97
Slack, C. R., 513
Slade, W. R., 220
Slater, T. F., 271, 272, 273
Slayter, H. S., 394
Sletten, K., 183, 184
Sloan, P. R., 75, 76, 77, 82, 83
Slor, H., 316, 317,.318
Sluka, E., 11
Sly, W. S., 464, 472, 474
Small, P. A., Jr., 289, 290, 297
Smalley, E. B., 277
Smayda, T. J., 75
Smith, A., 400, 408
Smith, A. J., 52, 53, 55, 513, 514
Smith, B., 441
Smith, D. C., 64
Smith, D. G., 102
Smith, D. H., 159, 160
Smith, E. L., 182, 184
Smith, H. O., 464
Smith, H. W., 134, 160, 172, 173
Smith, I. M., 213, 214
Smith, J. S., 364
Smith, K. M., 38, 39
Smith, K. O., 444
Smith, L., 181, 184, 187, 192, 193, 194
Smith, L. M., 272
Smith, M., 457
Smith, N. R., 324, 340, 341, 346
Smith, R. V., 37, 38
Smith, S. M., 133, 155, 158
Smithies, O., 287, 288
Smith-Sonneborn, J. E., 125
Smythe, D. S., 273
Snowdon, W. A., 218
Snowswell, A. M., 509
Snyder, W. C., 277
Sobcinski, P. Z., 250, 251
Sobey, W. R., 364
Soehner, R. L., 363
Sohler, A., 92
Solomon, J. M., 290
Sompolinsky, D., 148, 171
Sonnabend, J., 309
Sonneborn, D., 103
Sonneborne, T. M., 120
Soriano, S., 48
Sorokin, Y. I., 502
Sorour, A., 262
Southam, C. M., 433, 438
Spaeth, J. P., 77
Spaun, J., 259
Spear, P. G., 438
Spearing, J. K., 24, 36, 37
Spector, W. G., 272
Spensley, P. C., 277
Spicer, S. S., 77, 79, 80
Spiegelman, S., 233, 306, 309, 316, 317, 318
Spiegelman, W., 464, 470
Spooner, D. F., 121
Sporn, M. B., 275
Spotnitz, A., 76, 77, 80
Sprinz, H., 246, 252, 261, 264
Srubar, B., 210
Stadtman, E. R., 501
Stadtman, T. C., 503
Stamer, J. R., 341, 342
Standshov, F. B., 349
Stanier, R. Y., 52, 53, 55, 513, 514
Stanners, C. P., 410, 413
Starman, B., 309
Starr, T. J., 373
Stavitsky, A. B., 290
Stecher, H., 16, 17
Steemann Nielsen, E., 82, 83
Steenberg, R. W., 255, 256, 258, 262
Steinert, G., 125
Steinert, M., 114, 123, 124, 125, 126
Steitz, J. E. A., 307, 308
Stelling-Dekker, N. M., 324
Stellmann, C., 212
Stelos, P., 11
Stempke, G. W., 297
Stenkvist, B., 396
Stent, G. S., 452, 458
Stephens, K., 57
Steplewski, Z., 419
Stevens, J. G., 431, 445
Stevens, M. E. M., 275
Stević, B., 332
Stewart, D. L., 211, 217, 218, 224, 225, 226, 227, 230, 232, 234, 235
Stewart, W. D. P., 50, 51, 52, 64
Stich, H. F., 401
Stirm, S., 155
Stock, H. F., 412
Stocker, B. A. D., 133, 155, 158
Stoker, M., 393, 399, 400, 408, 410, 411
Stoker, M. G. P., 395, 396, 399
Stokstad, E. L. R., 116
Stollar, V., 430, 440, 442
Stoltz, D. B., 412
Storz, H., 224
Stotz, F. H., 182, 185, 188, 192, 194, 195
Stouthamer, A. H., 141

Stoyla, B., 334
Stoyla, B. O., 342
Straat, P. A., 193, 492
Strack, H. B., 457
Sträuli, U., 271, 272, 273
Strauss, J. H., 306
Strickland, J. D. H., 57, 76, 77
Strobbe, R., 211
Strober, S., 290
Strohl, W. A., 398, 409
Strohmaier, K., 225, 227, 229
Strominger, J. L., 103
Strong, F. M., 277
Stuart, A., 306
Stubblefield, R. D., 269
Stubbs, E. A., 306
Studier, F. W., 457
Sturgeon, R. J., 96, 101
Suarez, H., 419
Subak-Sharpe, H., 215, 216, 232, 395, 411, 429, 434, 439
Subbarow, Y., 112
Sudraud, P., 338, 340, 344, 345
Sueoka, N., 394
Sugiyama, T., 308
Sultanian, I. V., 397
Summers, D. F., 307, 309
Sun, C. N., 36
Suna, F., 159
Sundhagul, M., 100
Suoka, N., 117
Suomalainen, H., 334
Surdeanu, M., 146, 159, 160
Susor, W. A., 49
Süssdorf, D. H., 10
Sussman, A. S., 102
Sussman, M., 393
Sutmöller, P., 207, 208
Suverkrop, B., 340, 344
Suzuki, H., 185
Suzuki, I., 495, 496, 497, 498, 506, 510, 511, 512, 513
Suzuki, Y., 147
Švejcar, V., 327
Swartz, M. N., 394, 395
Sweets, H. H., 112
Swift, E., 5th, 80
Swinton, D., 56, 64
Sydiskis, R. J., 432, 444
Synge, R. L. M., 270
Syrett, P. J., 497, 498, 501, 505, 506, 511
Szenberg, A., 292
Szilard, L., 289, 539
Szpirer, J., 464, 468
Szybalski, W., 363, 464, 472

T

Taber, H. W., 191
Taggart, J. V., 259
Taguchi, F., 401, 402, 403, 431
Taguchi, K., 397
Taha, E. E. M., 58
Taher, M., 366
Takahashi, M., 403, 406, 435, 440
Takano, T., 133, 153, 156
Takehara, M., 363
Takemoto, K. K., 402, 403, 407, 409, 445
Taki, C., 349
Taliaferro, L. G., 3, 5, 6, 7, 8, 10, 11, 12
Taliaferro, W. H., 1-14; 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Tallan, I., 474
Talmage, D. W., 10, 11, 293, 294
Talpasayi, E. R. S., 35, 36, 40
Talukdar, S., 55
Tamayo, J. F., 262
Tamiya, N., 500
Tamm, I., 385
Tamura, G., 183
Tamura, H., 160
Tanaka, K., 102
Tanaka, T., 160
Tanford, C., 284
Taniguchi, S., 186, 191, 492, 496, 504
Tankersley, R. W., Jr., 439
Tannenbaum, S. W., 285
Tanzer, J., 398
Tappan, H., 71, 72
Tarantola, C., 324
Tarditi, A., 338, 339
Tasaki, A., 186
Tatum, E. L., 88, 89, 92, 96, 97, 99, 100, 308
Tavitian, A., 402
Taylor, A., 270, 271, 272, 273
Taylor, A. L., 453
Taylor, B. F., 496, 497, 510, 511
Taylor, C. E. D., 171
Taylor, C. P. S., 191
Taylor, D. N., 192
Taylor, K., 464, 472
Taylor, W. R., 80
Tchelistcheff, A., 340, 344
Tdinfsova, E. N., 324
Teale, F. W. J., 188
Tee, G. H., 364
Telling, R. C., 211, 217, 519
Temin, H. M., 409
Temperli, A., 338
Temple, K. L., 498
Templeton, B., 462
Tennant, R. W., 437, 441
Teodorescu, S., 348
Terinha, A. M., 367
Terré, J., 212
Terry, W. C., 283
Terzaroli, A. L., 329
Tessler, J., 225, 226
Tetsuka, T., 433
Teuisson, D. J., 276
Tevethia, S. S., 398, 415, 444
Than-Tun, 23
Thely, M., 221
Theorell, H., 182
Thiel, J. F., 444
Thomas, C. A., Jr., 393, 457, 476
Thomas, D. C., 429, 432
Thomas, D. S., 102
Thomas, M., 395, 398, 412
Thomas, R., 452, 453, 456, 463, 464, 468, 470, 471, 472
Thompson, J. F., 495
Thompson, N., 533
Thor, D. E., 291
Thorbecke, G. J., 299
Thorne, H. V., 224, 232, 393, 412, 438
Thoukis, G., 349
Tietz, A. M., 116
Tilden, E. B., 116
Till, J. E., 395, 396, 400, 410, 413
Timuk, O. E., 333, 339
Ting, R. C., 418
Tirdea, C., 324
Tischer, I., 33, 35
Tischer, R. G., 40, 58
Tissières, A., 185
Titani, K., 285, 286
Titmuss, D. H. J., 361
Toama, M. A., 92
Tobie, E. J., 113, 122, 124
Todaro, G. J., 396, 397, 398, 399, 406, 407, 408, 409, 410, 411, 413, 414, 443
Toft, D., 291
Tokumaru, T., 433
Tolbert, N. E., 35
Tomizawa, J., 457
Tomkins, J. K. N., 368, 385
Tooze, J., 308
Tormo, J., 364, 377
Torrii, K., 495
Touisnis, A. J., 261
Tournier, P., 419, 439
Towers, N. R., 271, 272, 273
Towne, J. C., 512

Townsend, R. J., 276
Trager, W., 110, 113, 114, 115, 116, 126
Traub, E., 204, 205, 212, 215, 224, 235, 236
Traum, J., 203, 206, 207
Trautman, R., 206, 211, 223, 224, 227, 228, 229, 230, 231, 235, 236, 237
Trautner, T. A., 394, 395
Trautwein, K., 204, 207, 208
Treffers, H. P., 10
Trejos, A., 112
Trentin, J. J., 293, 398, 406, 412, 440
Trentini, W., 533, 536
Treptow, H., 349
Trevithick, J. R., 100
Troost, G., 344
Trotter, C. D., 453
Trotter, M. J., 99
Trucco, E., 538, 539
Trudinger, P. A., 495, 496, 497, 511, 512, 513
Trukhachev, A. A., 385
Truscott, J. H. L., 334
Trussell, P. C., 499
Tscheuschner, I. T., 331, 335
Tsetlin, E. M., 400
Tsuchiya, H., 519, 527, 534, 545
Tsuchiya, T., 91, 99
Tsujimoto, H. Y., 49
Tsung, C. M., 307
Tsunoda, H., 273
Tsuru, K., 367
Tsusué, Y., 57
Tsutsumi, A., 397
Tsyb, T. S., 333, 342
Tubbs, R. K., 126
Tuman'lants, L. I., 334
Tung, K. K., 97
Tuppy, H., 182, 184
Turner, H. C., 397, 399, 416
Turtura, G. C., 349
Tuzimura, K., 193
Tytell, A. A., 220, 438
Tyurin, S. T., 334

U

Ubertini, B., 210, 211, 216, 217
Uchida, S., 445
Ueda, K., 39
Ueda, M., 349
Ueda, S., 403, 435
Uhlmann, D., 21
Uhlmann, W., 212, 214, 215
Uhr, J. W., 290
Ullrich, W., 339
Ullstrup, A. J., 279
Ulrich, J., 76
Umbreit, W. W., 505
Underwood, B., 232, 233
Unowsky, M., 147
Unz, R. F., 498
Urbano, P., 432
Urry, D. W., 185
Ussing, H. H., 258

V

Váczi, L., 439
Vakhtin, J. B., 291
Valentine, R. C., 431, 438, 500, 503
Valkanov, A., 72, 73
Vallée, H., 204
Vallee, J., 218
Van Assel, S., 125, 126
Van Baalen, C., 49, 50, 52, 54, 56, 57, 59, 63
van Bekkum, J. G., 205, 207, 210, 212
Van Bruggren, E. F. J., 125
Van Den Hamer, J. A., 340
Vandeputte, M., 442
Vanderpool, E. A., 397, 398, 399, 417
Van der Walt, J. P., 330, 331, 335, 336
Vande Woude, G. F., 222, 223, 224, 225, 227, 229, 231, 233
van Gelder, B. F., 185
Van Gool, A., 193, 491, 492, 504
van Hoosier, G. L., Jr., 398, 406, 440
van Iterson, G., 94
Van Kerken, A. E., 324, 330, 331, 335, 336
Van Scott, B. J., 405
Van Winkle, Q., 126
van Wisselingh, C., 90
Van Zyl, J. A., 330, 333, 334, 336, 337, 342, 348, 349
Varallyay, S., 254
Varner, J. E., 491, 492, 510, 514
Varnum, J., 182, 184
Vasilatos, G., 330
Vasquez, D., 147
Vasquez Martinez, D., 333
Vassalli, P., 292
Vassilieva, N. N., 400
Vaughn, R. H., 323, 339, 340, 341, 342, 344, 345, 346, 347
Vaz de Oliviera, M. M. F., 329
Venkataraman, G. S., 17
Verge, J., 213, 214
Vermeulen, G. J., 210
Verna, J. J., 371
Vernon, L. P., 49, 183, 194, 498, 502
Vernon, T. M., 263
Verona, O., 323, 324, 330, 332, 334, 335
Versage, P. M., 246, 264
Verwey, W. F., 247, 260
Vetsch, U., 341
Vickerman, K., 113, 120, 123, 124
Vielle, F., 405, 436, 437
Vigario, J. D., 367
Vigassy, J., 56
Vilar Rosa da Costa, A., 548
Villanueva, J. R., 89, 93
Villee, C., 291
Villee, D. B., 291
Vinograd, J., 126, 393, 412
Viñuela, E., 308, 312, 317
Vinyard, W. C., 48
Vishniac, W., 40, 60, 61, 495, 496, 500, 505, 511, 512, 513, 514
Vizoso, A. D., 411
Voelz, H., 36
Voelz, U., 36
Vogel, H. J., 117, 118
Vogell, W., 433, 438
Vogler, K. G., 505
Vogt, M., 395, 396, 403, 404, 406, 410, 413, 414, 415, 430, 431, 435, 440, 441
Volcani, B., 53
Voller, A., 121, 122
von Brand, T., 110, 113, 115, 121, 122, 124
Von Forrester, H., 538
von Hippel, P. H., 317
von Saltza, M. H., 115
von Stosch, H. A., 71, 72, 73
von Wettstein, F., 90
von Zastrow, E. M., 24, 31, 35
Vorobyer, V. I., 291
Vredenberg, W. J., 49, 186

W

Wagner, J. E., 412
Wagner, M. J., 193
Walden, C. C., 498
Waldmann, O., 204, 207, 208, 210, 211
Walker, D. A., 50
Walker, D. L., 363, 365, 371
Walker, P. J., 110, 120
Wallace, F. G., 110, 115, 123
Wallace, R., 396
Wallnöfer, P., 348
Walne, P. L., 38, 39
Walsby, A. E., 40, 60
Walsh, A. D., 270

Walsh, K. A., 286
Wang, C. S., 96
Wang, L. C., 96, 103
Wang, M. C., 96, 103, 104
Ward, C., 92, 103, 104
Ward, H., 533
Ward, V., 96, 101
Warden, D., 393, 412, 438
Wardle, E., 205, 216
Warmke, H. E., 278
Warocquier, R., 438, 440
Wasmuth, E. H., 438
Watabe, N., 71, 75, 77, 78, 79, 80
Watanabe, A., 51, 53, 54, 55, 64
Watanabe, I., 193
Watanabe, S., 445
Watanabe, T., 133, 136, 138, 142, 145, 148, 153, 156, 160, 169, 174
Watanabe, Y., 247, 260
Waterson, A. P., 230, 237
Watkins, J. F., 418, 419
Watson, C. E., 148, 159, 160
Watson, D. H., 405, 433, 434, 438
Watson, J. D., 286, 309
Watson, M. R., 56
Watson, R., 393, 412
Webb, A. D., 340, 344, 345
Webb, M., 116
Webb, R. B., 339, 344, 345
Weber, K., 307, 308
Weber, M., 499
Weber, M. M., 115, 116, 125
Webster, D. A., 53
Webster, G. C., 53, 54
Webster, J., 102
Webster, N., 454
Wecker, E. E., 291
Weger, B., 344
Wegner, L. A., 349
Wehmeyer, P., 211
Weier, T. E., 21, 22, 23, 41
Weigle, J., 174, 461, 464, 476
Weigle, W. O., 299, 300
Weil, J., 456, 465, 479, 480, 481
Weil, R., 393, 394, 406, 415, 430, 432, 435, 440, 441, 442
Weiler, E., 290, 291, 292
Weiler, I. J., 290
Weinbach, E. C., 124
Weinman, D., 113
Weinstein, D., 412, 413
Weinzierl, J., 182, 184
Weisberg, R. A., 395, 413, 478, 480
Weiss, B., 463
Weiss, D., 293, 494
Weiss, M. C., 420
Weiss, S. B., 309
Weissbach, A., 457, 475
Weissfellner, H., 76, 77, 79, 80, 81, 82
Weissman, S. M., 394, 398, 406, 407, 417, 431, 442, 443
Weissmann, C., 305, 306, 309, 312, 313, 316, 317, 318
Wejnar, R., 344
Wellington, N. A. M., 277
Wells, S. A., Jr., 398, 414
Wensink, P. C., 393
Werbin, H., 63
Werbitzki, F. W., 125
Werchau, H., 430, 442
Werkman, C. H., 512, 513
Wessels, J. G. H., 96, 102, 103
Wesslén, T., 218, 225, 396, 413
Weston, C. R., 48
Westphal, H., 430, 442
Westwood, J. C. N., 361, 362, 363, 364, 366, 367, 381, 384
Wheeler, H., 269, 277, 278, 279, 280
Whistler, H. C., 99
White, A. F., 276
White, B. J., 397, 398, 412, 413
White, D., 495
White, D. C., 187, 193, 194, 195
White, E. P., 269, 270, 271, 273
White, F. G., 502
White, H. B., 363, 374
Whiting, G. C., 343
Whitley, E., 285
Whitney, P. L., 284
Whitton, B. A., 17, 40, 41, 42, 61, 62, 64
Wiberg, S. J., 409
Wicker, R., 401, 419, 439
Wickerham, L. J., 324
Wiener, A., 397
Wijers, D. J. B., 120
Wikler, M., 285, 286
Wilbur, K. M., 71, 75, 77, 78, 79, 80
Wilcox, M., 307
Wilcox, W. C., 377, 378
Wild, T. F., 224, 227
Wildman, S. G., 64
Wildon, D. C., 17, 19, 21, 22, 23, 35, 40, 41
Wildy, P., 433, 434, 438
Wilken, D. R., 104
Willard, J. M., 52
Willems, H. M. C. C., 156, 168
Willems, M., 307
Willems, R., 221
Williams, A. E., 57
Williams, B. L., 113
Williams, F. R., 188
Williams, G. M., 290
Williams, G. R., 504
Williams, J. F., 395, 396, 400
Williamson, J., 113, 524, 526, 531, 533
Willoughby, D. A., 272
Wilsenach, R., 103
Wilson, A. C., 296
Wilson, B. J., 273
Wilson, D. B., 291
Wilson, G. B., 17, 18, 24, 37, 40, 41
Wilson, L. G., 495
Wilson, P. W., 51, 185, 495
Wilson, T. R. S., 76
Wimpenny, J. W. T., 184, 185
Winkelstein, X. X., 290
Winocour, E., 394, 406, 407, 415, 417, 430, 431, 440, 441, 442, 443
Winter, W. P., 286
Wittenberger, C. L., 500
Wittman, H. G., 305
Wittmann, G., 205, 206, 211, 217, 218, 219, 220, 222
Wittmann, H., 348
Witzeman, J. S., 269, 274, 276, 277
Wogan, G. N., 269, 274, 275
Wolf, E., 332
Wolf, N., 293
Wolfe, M., 58
Wolfe, R. S., 503
Wolford, R., 397, 399
Wolhieter, J. A., 145, 174
Wolin, E. A., 503
Wolk, C. P., 40, 41, 60
Wollman, E. L., 153, 452, 453, 455, 458, 461, 468
Wolstenholme, D. R., 125, 126
Wolstenholme, G. E. W., 290
Wood, A. B., 277
Wood, B. J. B., 57
Wood, W. B., Jr., 371
Woodroofe, G. M., 364, 365, 367, 369
Woodson, B., 363, 373, 378, 380, 381, 382
Woolford, M. W., 273
Worker, N. A., 270, 271
Wright, B. E., 92, 103, 104
Wright, D. E., 269-82; 270, 271, 272, 273

Wright, E. A., 194
Wright, M., 471, 475
Wright, M. J., 363
Wrigley, C. W., 188
Wu, H., 411
Wu, J. H., 39, 63
Wu, R., 457, 463
Wurdig, G., 348, 349

Y

Yabe, Y., 397
Yaffe, D., 442
Yagi, T., 184, 500
Yamagishi, H., 476
Yamaguchi, T., 183
Yamaguchi, Y., 500
Yamakawa, T., 57
Yamamoto, H., 416
Yamamoto, Y., 51
Yamanaka, T., 132, 183, 195, 196, 502
Yamazaki, T., 341
Yamazoe, S., 276
Yanagita, T., 102
Yanofsky, C., 455, 456, 470, 471
Yarmolinsky, M., 464, 466, 467, 468, 469, 470, 473, 474, 475, 476
Yates, M. G., 499
Yen, C. H., 137, 156
Yerganian, G., 412
Yohn, D. S., 364, 365, 366, 367, 383, 401, 412, 436
Yokoto, T., 147, 148
Yokotsuka, I., 334
Yonetani, T., 181, 182, 192
Yoo, T. J., 284
York, J. L., 192
Yoshida, T. O., 405
Yoshizumi, H., 342
Young, E. O., 297
Young, E. T., 457
Yuan, L., 291
Yuill, J. L., 97

Z

Zachariah, K., 103
Zajára Jiménez, J., 335
Zajdela, F., 276
Zamir, A., 306
Zarlengo, M. H., 284
Zeeman, A. S., 337
Zehnder, A., 37
Zeldin, B., 56, 64
Zerahn, K., 258
Zeuthern, E., 533
Zhdanov, V. M., 385
Zhevner, V. D., 50
Zhuravleva, V. P., 333, 339
Zichini, M. L., 463, 464, 471, 473, 476
Zickler, F., 341
Ziliotto, H. L., 349
Zinder, N. D., 153, 284, 305, 307, 309, 311, 312, 314, 315, 316, 318
Zissler, J., 464, 465, 466, 467, 474, 476
Zoeth, B., 217
Zubay, G., 56
Zuloaga, G. G., 226
Zwartouw, H. T., 361, 362, 364, 366, 377
Zygraich, N., 221

SUBJECT INDEX

A

Ablastin
  discovery of, 3
Acetic acid
  bacteria forming, 345-46
Acetobacter oxydans
  cytochromes of, 187
Acetobacter pasteurianum
  cytochromes of, 194
Acetobacter sp.
  in vinegar production, 346
Acetobacter suboxydans
  cytochromes of, 187, 191-92
Acetyl-coenzyme A synthetase
  in cyanophytes, 52
Acetylethyleneimine
  to inactivate vaccine, 212, 225-26, 236
N-Acetylglucosamine
  in fungal cell wall, 89, 97
Achromobacter
  cytochromes of, 194
Aconitase
  in cyanophytes, 52
Acrasiales
  cell wall of, 91
Acriflavine
  of kinetoplast DNA, 125-26
Actinomycin D
  on poxvirus multiplication, 384-85
Adeno-associated viruses
  adenovirus-dependence of, 444
Adenosine-5-phosphosulfate (APS)
  in bacterial substrate phosphorylation, 510-11
Adenosine triphosphatase
  in poxviruses, 361
Adenosine triphosphate (ATP)
  bacterial coupling of, 491
Adenoviruses
  and cellular RNA synthesis, 249-50
  DNA synthesis in, 440
  enzymes for protein synthesis by, 435
  groups of, 393
  in vitro transformation by, 393, 397-98, 401-3, 406, 411-14
  synthesis of structural proteins of, 438
  T antigens of, 401-2
Adenovirus-SV40 hybrid
  description of, 443-44
  in vitro transformation by, 398, 400, 409, 413-14, 417-18
Aflatoxins, 274-76
  biochemistry and carcinogenicity of, 275
  fluorescence of, 274
  fungal sources of, 274
  plant and microorganisms affected by, 276
Agaricus
  cell wall of, 96
Akinetics
  of cyanophytes, 39-41
  photomicrograph of, 34
Aldolase
  in cyanophytes, 52
Algae, blue-green (Cyanophyta)
  adaptation to chloramphenicol by, 42
  anaerobic survival of, 50
  auxin activity in, 59
  cell movements, 61
  cellular differentiation in, 60-61
  chemical composition of, 58-59
  colorless forms of, 48
  compared to bacteria, 47
  distribution of, 48
  ecology, physiology, and biochemistry of, 47-70
  fine structure of, 15-46
    cellular inclusions, 25-39
    environmental effects on, 41-42
    external structures and cell walls, 16-20
    introduction to, 15-16
    nucleoplasm, 24-25
    photosynthetic thylakoids, 21-24
    plasmalemma, 20-21
    resistant spores, 39-41
  hydrogen ion requirements of, 59-60
  mineral nutrition in, 58-59
  nitrogen assimilation by, 50-52
  nucleic acids of, 57-58
  obligate photoautotrophy in, 54-55
  photosynthesis in, 48-50
  pigment changes in, 42
  polymyxin B effects on, 42
  respiration in, 52-54
  susceptibility to viruses, 62-64
  symbiosis of, 64-65
  thermophilic forms of, 42
  tolerance to temperatures and desiccation, 62-63
  toxic metabolic factors of, 61-62
  vitamins and growth substances in, 59
Algae, coccolithophorids
  biology and physiology of, 71-86
Allomyces
  cell wall of, 89, 101, 103
Allophycocyanin
  in blue-green algae, 58
  photochemical receptor role of, 60
Allotypy
  characteristics of, 297-99
Alternaria
  cell wall of, 89
Ameba proteus
  growth rates of, 533
para-Aminohippurate
  inhibition of uptake of by cholera toxins, 259
2-Amino-4-hydroxy-6-dihydroxypropyl pteridine
  see Biopterin
2-Aminopurine
  mutagenic effect of, 385
Ammonia
  bacterial oxidation of, 493-95
    pathway of, 495
  in cholera toxin, 259
Anabaena
  fine structure of, 17, 23, 27, 29, 31, 35, 40-41
Anabaena azollae
  fine structure of, 31, 35
  resistant spores in, 40
Anabaena cylindrica
  resistant spores of, 40
Anabaena doliolum
  nonsporulating strains of, 41
Anabaena flos-aquae
  chemical composition of, 58
Anabaena variabilis

DNA fibrils of, 55
interaction of photosynthesis and respiration in, 53-54
light requirements of, 55
Anacystis montana
fine structure of, 18, 20, 29
Anacystis nidulans
antibiotic effects on, 56
antibiotic resistance of, 61
chemical composition of, 58
cytochromes of, 53
fine structure of, 19, 21, 25, 31
light requirements of, 55
RNA of, 57
Anthoblastomyces campinensis
in winemaking, 332
Anthoblastomyces cryptococcoides
in winemaking, 332
Anthoblastomyces saccharophilus
in winemaking, 332
Antibiotics
bacterial resistance to, 131-76
on cyanophyte growth, 56
feeding of livestock with, 172-73
as food preservatives, 173
Antibodies
to foot-and-mouth disease virus, 237
formation of, 10-12
variables of, 299-300
gene pair, 288
to insulin
genetic factors of, 293
potential of cell to form, 292-93
structure of, 295-97, 301
synthesis of, 10-11
Antigen
foot-and-mouth disease, 203, 234-37
isoantigens
genetics of, 289
transplantation rejection, 415-16, 418
virus-specific tumor antigen, 416-17
types of, 433
see also T antigen
Antisera
characteristics of, 293-95
formation of
and antibody structure, 295-97
1-β-D-Arabinofuranosylcytosine
on DNA synthesis, 431
Arginase
in papillomas, 436-37
levels of, 405
Arginine
infective role of, 439-40
Ascomycetes
cell wall of, 91, 98
Aspergillic acid
source of, 273
Aspergillus
cell wall of, 89, 96-97, 101-2
Aspergillus flavus
toxin from, 269, 273-74, 276
Aspergillus niger
toxin from, 274
Aspergillus parasiticus
toxin from, 274
Aspergillus ruber
toxin from, 274
Aspergillus sp.
toxins from, 273-76
in winemaking, 332
Aspergillus wentii
ammonia oxidation by, 493
toxin from, 274
Aureobasidium pullalans (Dematium pullalans)
in winemaking, 331-32
Autotrophy
definition of, 490
regulation of energy coupling, 513-14
8-Azaguanine
virus inhibition by, 385
6-Azauridine
virus inhibition by, 385
Azobacter agilis
growth rate of, 534, 537
Azotobacter vinelandii
cytochromes of, 185, 194-95

B

Bacillus
in winemaking, 339
Bacillus cereus
growth rate of, 534
interdivision times of, 525
Bacillus megaterium
cytochromes of, 183, 192-93
Bacillus pupilliae
cytochromes of, 194
Bacillus ramosus
growth of, 533
Bacillus stearothermophilus
cytochromes of, 193
Bacillus subtilis
cytochromes of, 183, 193
Bacteria
aflatoxin effects on, 276
lysogenic
and DNA viruses, 419-20
in wine, 338-47
deacidification by malo-lactic bacteria, 343-44
interaction with yeast, 347
lactic acid bacteria, 340-43
malo-lactic fermentation, 340-45
spoilage, 345-47
Bacteria, chemolithotrophic
energy-coupling mechanisms in, 489-518
ATP-dependent reduction of NAD, 507-10
carbon dioxide fixation, 512-13
oxidation of ammonia, 493-95
oxidation of ferrous ions, 498-99
oxidation of formate, 504
oxidation of hydrogen, 499-504
oxidation of inorganic sulfur compounds, 495-98
oxidation of nitrite, 491-93
oxidative phosphorylation, 504-7
regulation of energy coupling, 513-14
substrate phosphorylation, 510-12
respiratory and intermediary metabolism of, 490
Bacteriophage
coliphages
structure of, 306
lambda
formation of mutants of, 460-65, 470-71, 483
lysogeny in, 451-84
properties of known genes of, 464
vegetative and prophage maps of, 456
lambda b2
attachment of, 476-83
lambda dg
attachment of, 482-83
phi chi 174
replication in, 309
prophage
cryptic lambda, 460
genetic maps of, 455-56
induction of, 452-53
Qβ
RNA of, 306, 316-18
restriction of by transfer factors, 155-58

RNA, 307-8
coat proteins of, 307
genome structure, 308
transducing, 459-62
see also Lysogeny
Bacterium
in winemaking, 339
Bacterium aerogenes
interdivision times of, 525
Bacterium anitratum
cytochromes of, 189
Basidiomycetes
cell wall of, 91, 96
Beggiatoa
gliding motion of, 19
Bence Jones proteins
structure of, 284-85
Berenil
DNA binding of, 126
Betabacterium
in winemaking, 340
Biopterin
as folic acid replacement, 116
Bipolar body
of Crithidia oncopelti, 117-20
Blastocladiella emersonii
polymer synthesis in cell wall of, 103
Blue-green algae
see Algae, blue-green
Boron
in cyanophytes, 58
Botrytis
cell wall of, 102
Brettanomyces claussenii
in winemaking, 331
Brettanomyces intermedius
in winemaking, 331
Brettanomyces lambicus
in winemaking, 331
Brettanomyces schanderlii
in winemaking, 325, 327
Brettanomyces sp.
in winemaking, 331, 335-36
Brettanomyces vini
in winemaking, 325-27
Bromodeoxyuridine
and DNA synthesis, 404
on poxvirus multiplication, 384-85
on protein synthesis, 432
Bryophytes
symbiosis in, 64

C

Calcium
in coccoliths, 80
in cyanophytes, 58
Calothrix
fine structure of, 17
Cancer
and fungal toxins, 280
see also Viruses, oncogenic DNA
Candida albicans
cell wall of, 101
in winemaking, 331
Candida boidini
in winemaking, 331, 334
Candida guilliermondii
in winemaking, 332
Candida ingens
in winemaking, 331, 335
Candida intermedia
in winemaking, 332, 335
Candida krusei
in winemaking, 326, 329-32
Candida lipolytica
in winemaking, 331
Candida melinii
in winemaking, 330-31
Candida mycoderma
in winemaking, 326-27, 331-32, 334-36
Candida parapsilosis
in winemaking, 326, 331-32
Candida pelliculosa
in winemaking, 331
Candida pulcherrima
in winemaking, 325-32
Candida rugosa
in winemaking, 331
Candida scotti
in winemaking, 332
Candida solani
in winemaking, 330
Candida sorbosa
in winemaking, 331
Candida stellatoidea
in winemaking, 332
Candida tropicalis
in winemaking, 330
Candida zeylanoides
in winemaking, 326-27, 336
Carbon dioxide
bacterial fixation of, 512-13
Carboxydismutase
carbon dioxide fixation by, 512
Carboxylation
in cyanophytes, 50
Carcinosarcomas
origin of, 414
Carotenoids
of cyanophytes, 22, 58
Cattle
foot-and-mouth disease, 201-44
Cell culture
adult chicken cells on chorioallantoic membrane, 293
Cell division
mathematics of, 521, 527-29
Cell membrane
see Cell wall; and Plasmalemma
Cells
BHK-21
viral transformation of, 396, 399-400, 408-11
DNA synthesis in
after virus infection, 440-43
fusion of
mechanism of, 419
metabolism of
after virus infection, 427-50
morphology of
after viral transformation, 409-10
spontaneous transformation of, 392
virus transformation of, 391-426
Cellulose
in fungal cell wall, 90-94, 96, 103
Cell wall
algal
composition, 18-19
endosymbiont modification of, 20
lysozyme effects on, 17, 19-20
morphology of, 17-18
pores of, 19
sheath morphology, 16-17
fungal
analytical techniques of studying, 89-90
assembly patterns in, 104
chemical differentiation of, 99-101
chemistry-taxonomy, 90-99
construction in, 103-4
lipids of, 88
morphogenesis and structure, 99-108
polymerization sites in, 104
polymer synthesis in, 103-4
polysaccharide in, 89
protein in, 88
splitting enzymes of, 101-2
ultrastructure development, 102-3
Ceratocystis
cell wall of, 96
Chagas disease
cause of, 109
Chicks
adaptation of foot-and-mouth

disease virus to, 213-14
Chitin
in fungal cell wall, 91, 94-98
Chitosan
in fungal cell wall, 94-95
Chloramphenicol
adaptation of blue-green algae to, 42
bacterial resistance to, 132, 136, 141-42, 145, 147-49, 162, 165, 171-72
Chlorobium
photochemical apparatus of, 23
Chlorobium thiosulfatophilum
cytochromes of, 186-87
Chlorogloea fritschii
chemical composition of, 57
growth without light, 54
life cycle of, 61
Chlorophyll
in blue-green algae, 22-23
Chlorophyll-a
in blue-green algae, 49, 58
Chloroplasts
evolution of, 24, 64
Cholera toxins, 245-68
culture media for, 252
discussion, 262-65
hemolysin, 259-60
human immune response to infection, 263-64
introduction, 246
titration of, 253
Type 1, 247-49
absorption of, 249
egg assay of, 248-49
Type 2, 249-57, 264-65
canine model, 255-56
cholerigenic, 249-50
immunological activity of, 251, 254-55
inconsistencies in properties of, 264
infant rabbit model, 250-51
interrelationships of, 264-65
intradermal toxicity, 256-57
mammalian cell culture toxin, 257
nature of, 253-54
permeability factor, 256, 264-65
rabbit ileal loop model, 251-55
Type 3, 257-59
inhibition of p-aminohippurate uptake, 259
sodium transport inhibition, 258-59
types of, 247
validity of animals as models of, 260-62
Choleragen
definition of, 251
Syncase, 251, 260
Chondriome
-kinetoplast complex
in trypanosomatids, 123
Chromatium
cytochromes of, 185-86
sulfur oxidation in, 496
Chromobacterium
in winemaking, 339
Chytridiomycetes
cell wall of, 91
Citramalic acid
wine source of, 344
Citrate synthase
in cyanophytes, 52
Citrobacter
transferable drug resistance in, 160
Cloaca
transferable drug resistance in, 160
Cobalt
on nitrogen fixation, 52, 59
Coccolithophorids
biology and physiology of, 71-86
coccolith formation, 77-83
growth and nutrition of, 75-77
life cycles, 73-75
selection of species for culture studies, 71-72
number of species of, 72
Coccoliths
crystallography and fine structure of, 77-78
model of morphology of, 79
physiology of formation of, 71, 77-83
light-dependent reaction formula, 81
photosynthesis role in, 81-82
Coccolithus huxleyi
biology and physiology of, 72, 74-82
coccolith formation in, 78-82
growth and nutrition of, 75-77
reproduction of, 74
Coccolithus pelagicus
biology and physiology of, 72-74, 77-79
life cycle of, 73
Colchicine
on cyanophyte growth, 56
Columbia SK virus
coat proteins of, 307
Complement
cytochrome b and a, 187
fixation
in foot-and-mouth disease, 204, 235
Copper
in cyanophytes, 58
Corynebacterium diphtheriae
cytochromes of, 193
Cowpox
recombinant with smallpox, 369
see also Poxviruses
Creatine phosphate
genetics of formation of, 297
Cricosphaera carterae
physiology and biology of, 71-73
Cricosphaera elongata
taxonomy of, 72
Cricosphaera sp.
coccolith growth in, 79-82
in Plymouth Culture Collection, 72
Crithidia fasciculata
characteristics of, 119
isolation of kinetoplasts from, 125
pteridine requirement of, 115-16
Crithidia oncopelti
bipolar body of, 117-20
characteristics of, 119
nutritional characteristics of, 116-17
Cryptococcaceae
cell wall of, 91
Cryptococcus albidus
in winemaking, 329, 331-32
Cryptococcus diffluens
in winemaking, 331-32
Cryptococcus laurentii
in winemaking, 331-32
Cryptococcus luteolus
in winemaking, 331
Cyanelles
structure of, 64-65
Cyanocyta korschikoffiana
wall modification in, 20
Cyanophages
to control blue-green algae, 39
ecological significance of, 63-64
lytic ability of, 63
Cyanophora
fine structure of, 23
Cyanophora paradoxa
cyanelles of, 64-65
Cyanophycin
in algal cells, 31, 33, 36
Cyanophyta
see Algae, blue-green
Cycads

symbiosis in, 64
Cyclococcolithus fragilis
life cycle of, 74
Cycloheximide
on poxvirus multiplication, 384
Cylindrospermum
fine structure of, 19, 25, 31, 35
resistant spores of, 41
Cytochrome c reducing substance
in cyanophytes, 49
Cytochromes, bacterial, 181-200
in aerobic and anaerobic electron transport, 181
chemistry of, 181
mechanisms of inter- and intracytochromal electron transfer, 182
nomenclature, 182
structural and biosynthetic aspects of, 181
Cytochromes a, 192-94
a_1, 194
a_2
see Cytochromes d
and bacterial energy-coupling mechanisms, 494, 498
chemical nature of, 192-93
in trypanosomes, 122
Cytochromes b, 188-92
b_1, 188-89
b_4, 190
b_{558}, 189, 191-92
b_{560}, 190
b_{562}, 189-90
cytochromes o, 191-92
in bacterial energy-coupling reactions, 494
definition of, 188
energy-coupling mechanisms of, 494, 501
other, 189-90
P_{450}, 189-90
properties of, table, 189
in trypanosomes, 122
Cytochromes c, 182-87
alcohol: cytochrome c_{553} oxidoreductase, 187
c_2, 183-84
c_3, 184-85
c_4 and c_5, 185
c_{550}, 187
c_{551}, 187
c_{552}, 184, 186
c_{553}, 186-87
c_{554}, 49
c_{555}, 187
c' and cc', 185-86
chemical and physical properties of, 181
complex flavin-containing, 186-87
in cyanophytes, 53
definition and classification of, 182-83
energy-coupling mechanisms of, 494, 498-99, 501
Hemophilus parainfluenzae cytochrome c_1, 187
low molecular weight, 187
mitochondrial, 183
multiple nature of, 181
Cytochromes d, 194-96
characterization of, 194-95
Cytochromes oxidase (o)
characterization and purification of, 191-92
reviews on, 181
Cytosine arabinoside
of poxvirus multiplication, 384

D

Dactylium dendroides
cell wall of
structure of, 89
Darkness
algal growth in, 54-55
algal nitrogen fixation in, 51-52
coccolithophorid growth in, 77
Debaryomyces hansenii
in winemaking, 325, 331
Debaryomyces nicotianae
in winemaking, 331
Debaryomyces sp.
in winemaking, 332
Debaryomyces vini
in winemaking, 331
Deoxycytidylic acid (dCMP)
viral induction of, 403
Deoxyribonuclease (DNase)
in virus-infected cell, 434-36
on virus multiplication, 385
Deoxyribonucleic acid (DNA)
in cyanophytes, 25
fibril types, 55-56
in foot-and-mouth disease virus, 232
lymphoid cell synthesis of, 292
oncogenic DNA viruses, 391-426
of phage lambda
physical map of, 476-77
of phage lambda b_2, 476-77
replication of
frequency function of, 531
in phages, 471-72, 483
in poxvirus, 373-74
of resistance factors, 144-46
synthesis of
derepression of, 405-7
in polyoma-infected cells, 440-42
in SV40-infected cells, 442-43
switch-off mechanisms in, 408
of transfer factors, 174
of trypanosomatid kinetoplast, 125-27
of vaccinia virus, 362
Deoxyribonucleic acid polymerase
in poxviruses, 375-76
syntheses by, 318
viral induction of, 403-4
in virus-infected cell, 434-36
Deoxythymidylic acid kinase
viral induction of, 403
Deoxythymidylic acid synthetase
viral induction of, 403
Desiccation
blue-green algal tolerance of, 62-63
Desulfovibrio desulfuricans
cytochromes of, 184-85
substrate phosphorylation of, 510
Desulfovibrio gigas
cytochromes of, 184
and hydrogen oxidation, 503
Desulfovibrio vulgaris
hydrogen oxidation by, 503
Deuteromycetes
cell wall of, 91, 98
4-15-Diacetoxyscirpen-3-ol
isolation and characterization of, 277
3-(3,4-Dichlorphenyl)-1,1-dimethylurea (DCMU)
inhibition of coccolith formation by, 81
Dictyosterlim discoideum
cell wall of, 103
Diethyl pyrocarbonate (DEPC)
to stabilize wine, 348-49
Differentiation
in blue-green algae, 60-61
molecular hybridization, 298-99
Dihydrofolate reductase
viral induction of, 403
Dihydrofolic acid reductase
in virus-infected cell, 434-36
Dog
cholera toxin studies in, 255-56, 262
Drug resistance
in enterobacteria, 131-76

E

Ectromelia
growth cycle of, 367, 371
Encapsidation
of poxvirus, 382
Encephalomyocarditis virus
RNA replicative form in, 309
Endomyces
cell wall of, 96
Endomyces lindneri
in winemaking, 332
Endosymbiont
bipolar bodies of Crithidia oncopelti, 117-18
blue-green algae
cell wall modification in, 20
chloroplastic function of, 24
Energy-coupling mechanisms
in chemolithotrophic bacteria, 489-518
Enology
see Winemaking
Enterobacteria
growth of
steady-state for, 533
transferable drug resistance in, 131-76
biochemical mechanism of, 146-48
chemical composition of factors of, 144-46
conditions governing frequency of transfer, 158-59
distribution of, 159-60
ecology of, 166
effects of bacterial flora, 171-74
effects on primary host, 169-70
effects on secondary host, 170-74
interactions between chromosomal and extrachromosomal, 149-50
introduction to, 132
levels of resistance conferred by R factors, 148
linkages groups of resistance genes, 139-41
loss of, 142
mechanism of transfer, 153-55
nature of transfer factors, 174-75
operational similarities between F and R factors, 150-52
origin of resistance determinants, 152-53
origin of R factors and their effects on bacterial populations, 166-69
other potentialities of transfer factors, 175-76
phage restriction by transfer factors, 155-58
properties of, 132-34
relations between transfer factors and resistance determinants, 134-38
R factors and cell replication, 141-42
rise of resistant Salmonella typhimurium in Great Britain, 161-66
stability of R factors, 142-44
structure of R factors, 138-39
Enzymes
in lysogenic integration, 463
viral induction of, 403-5
in viral protein synthesis, 434-38
Epiplasten
in algal cells, 35
Equine rhinopneumonitis
DNAs of, 395
Escherichia coli
aflatoxin inhibition of, 276
cytochromes of, 184-85, 188, 190, 194-95
DNA of, 56
DNA replication in, 531
energy-coupling mechanisms in, 492
genetic map of prophage attachment loci, 453
growth rate of, 533-34, 537, 542
lambda phages of
lysogeny in, 451-84
RNA polymerase of
viral binding of, 394
transferable drug resistance of, 133-35, 142, 144-45, 148, 150, 157-62, 168, 170, 172-73, 175
Euglena
interdivision times of, 526
Evolution
genetic mechanisms of hemoglobin chain development, 286
Excision
in lysogeny, 469-70

F

Fermentation
malo-lactic, 344-45
Ferredoxin
in cyanophyte photosynthesis, 49
Ferrobacillus
NAD reduction in, 508-9
Ferrobacillus ferrooxidans
carbon dioxide fixation by, 512
cytochromes of, 194
nutrition of, 498
Ferrobacillus sp.
oxidation of ferrous ions by, 498-99
Fibroma
growth cycle of, 366
titration of, 365
Fischerella
fine structure of, 17
Flagellates
trypanosomatid, 109-30
Flavin
in bacterial cytochromes, 186-87
Flavobacterium aurantiacum
aflatoxin effects on, 276
Flavodoxin
in sulfite reduction, 503
Fluorocarbon
on foot-and-mouth disease infectivity, 207-8
5-Fluorodeoxyuridine
to detect RNA, 429, 436
on poxvirus synthesis, 381, 384
p-Fluorophenylalanine
on poxvirus multiplication, 384
Folic acid
in Crithidia culture, 115
Foot-and-mouth disease, 201-44
biochemistry of virus, 221-37
antigens and antibodies, 235-37
biosynthetic cycle, 231-35
chemical and physical reactivity, 221-27
structure of virus, 227-31
conclusion, 237-38
control measures, 208-10
quarantine and vaccination, 209
stamping out, 209
systematic vaccination, 209-10
diagnosis of, 202-6
by animal inoculations, 203
clinical symptoms, 203
electron micrographs of virus and capsids, 230
experiments in virus-host relationships, 215-21

infectiousness and susceptibility, 215-18
interferon, 220-21
variability, 218-20
history of, 202
immunology of, 210-15
immunity after infection, 210
inactivated vaccines, 210-13
modified live virus vaccines, 213-15
passive immunity, 210
temperature effects on, 206, 223-24
transmission of, 206-8
indirect, 206-7
latency, 207-8
vectors for, 206
typing and subtyping, 203-6
virus classification, 235
Formate
bacterial oxidation of, 492, 504
Fowlpox virus
growth cycle of, 367
morphology and characterization of, 363-64
titration of, 365
Fresno mold
cause of, 347
L-Fucose
in fungal cell wall, 89, 94
Fungi
cell wall of, 87-108
chemical differentiation of, 99-101
chemistry-taxonomy, 90-99
construction of, 103-4
enzymes of, 101-2
structure of, 88-89
structure and morphogenesis, 99-105
taxonomic table, 91
ultrastructure of development, 102-3
hyphal morphogenesis, 103
spore germination in, 102-3
toxins of, 269-82
crystallization of host-specific plant toxin, 280
discussion, 280
introduction, 269
metabolities, 270
toxins affecting animals, 270-77
toxins affecting plants, 277-79
Furazolidone
transferable bacterial resistance to, 134, 142, 144, 162-63, 165, 171
Fusarium
cell wall of, 89, 96-97, 101
Fusarium equisiti
toxin from, 277
Fusarium scirpi
toxins from, 277
Fusarium sp.
toxins from, 277
Fusarium sporotrichoides
toxin from, 277
Fusarium tricinctum
toxin from, 277

G

Galactin
in fungal cell wall, 99
D-Galactosamine
in fungal cell wall, 89, 96-97, 100
D-Galactose
in fungal cell wall, 89, 94, 96-97
Genetics
cytogenetics, 411-13
gene properties of lambda phage, 464
genetic drift
effect on immunoglobulins, 296, 301
polymorphism
examples of, 296-97, 301
of poxvirus, 367-69
T antigen and chromosomes, 420
viral genome persistence in infected cell, 414-20
Genophore
definition of, 24
Germination
of fungal cell wall, 101
Gilbertella
cell wall of, 102
Glaucocystis
fine structure of, 23
Glaucocystis nostochinearum
cyanelles of, 64
Gliding
by blue-green algae, 19, 51
Gloeotrichia
fine structure of, 31
resistant spores of, 41
Glucan
in fungal cell wall, 93, 95-98
Glucanases
in fungal cell wall, 102
D-Glucosamine
in fungal cell wall, 89
D-Glucose
in fungal cell wall, 89, 97, 100
D-Glucuronic acid
in fungal cell wall, 89, 94, 100
Glutamic-oxalacetic transaminase
effect of cholera toxin on, 249
Glyceraldehyde-3-phosphate dehydrogenase
algal coenzymes of, 54
Glycinaldehyde
to inactivate vaccine, 212, 225-26
Glycogen
in fungal cell wall, 91-92
Goats
foot-and-mouth disease in, 203
Green monkey kidney cells
DNA synthesis in, 442
Growth, bacterial
kinetics of, 532-34
Guanidine
virus inhibition by, 235
Guinea pigs
foot-and-mouth disease in, 203

H

Hamster
see Cells, BHK-21
Hanseniaspora uvarum
in winemaking, 331
Hanseniaspora valbyensis
in winemaking, 325, 329, 331, 337
Hansenula anomala
in winemaking, 325-26, 330-32
Hansenula holstii
cell wall of, 104
Hansenula schneggii
cell wall of, 100
Hansenula sp.
in winemaking, 334
Hansenula subpelliculosa
in winemaking, 329
H chain
see Immunoglobulins
Helminthosporium carbonum
toxin from, 279
Helminthosporium sp.
toxin from, 277-79
Helminthosporium victoriae
toxin from, 277
Helminths
tests for infection with, 8
Hemagglutinin
of poxviruses, 364
Hemiascomycetes
cell wall of, 98
Hemolysin
in cholera toxin, 259-60
dynamics of production of, 10
radiation-induced modifica-

tions of, 11
Hemophilus parainfluenzae
cytochromes of, 187, 193-95
n-Heptyl ester (WS-7)
in winemaking, 349
Herpes simplex virus
antigenically different proteins from, 433
DNAs of, 395
thymidine kinase coding in, 405
Herpes virus
on cellular RNA synthesis, 429
enzymes for protein synthesis in, 434-35
synthesis of structural proteins of, 438
Heterocysts
of blue-green algae, 39-41
photomicrograph of, 34
Histones
on virus multiplication, 385
Histoplasma
cell wall of, 96, 100
Hydrazine
bacterial oxidation of, 494
Hydrogen
algal requirements of, 59-60
bacterial oxidation of, 499-504
dissimilatory nitrate reduction, 501-2
dissimilatory sulfate reduction, 502-3
hydrogenases, 499-500
hydrogenomonas, 500-1
methane formation, 503-4
possible electron transfer sequence, 501
Hydrogenomonas
oxidation of hydrogen by, 500-1
oxidative phosphorylation in, 507
Hydrogenomonas eutropha
hydrogen oxidation by, 500-1
Hydrogenomonas facilis
carbon dioxide fixation by, 512
hydrogen oxidation by, 500
Hydrogenomonas ruhlandi
hydrogenase of, 500
Hydroxyaflatoxins
isolation and characterization of, 274
p-Hydroxybenzoic acid
in winemaking, 349
Hydroxylamine
bacterial oxidation of, 494
virus mutation by, 226
Hydroxyproline
in fungal cell wall, 93
Hymenomonas sp.
in Plymouth Culture Collection, 72
Hyphae
fungal
morphogenesis of, 103
Hyphochytridiomycetes
cell wall of, 91, 94

I

Immune response
to cholera infection, 263-64
model of, 300
Immunity
mechanism of, 283-304
allotypy, 297-99
antibody structure and formation of antiserum, 295-97
antisera, 293-95
cell potential, 292-93
cells involved in, 290-92
characteristics of induction of cell differentiation, 295
germ line model of, 289
induction versus expression, 299-300
somatic mutation theory of, 286-89
structure, 283-86
summary of, 300-1
theories, 286-90
Immunization
see Vaccination
Immunoferrin technique
to discover T antigens, 401
Immunoglobulins
in antisera, 293
classes of, 283
combinations of, 294-95
conservation of genetic information of chains of, 296
gamma G
allotypic structure of, 297
gamma globulin
diagrammatic representation of multiple chain structure of, 284
genetic drift on, 296
H chains of
classes of, 283
immunoglobulin M
as primitive antibody, 290
L chains of
amino acid sequence of, 285
classes of, 283
comparison of kappas, 286
molecular structure of, 293-96
scheme for genetic origins of, 287
Immunology
of foot-and-mouth disease, 210-15
of parasitic infections, 4
Inclusions
algal, 25-39
cyanophycin, 31, 33
lipid, 36
polyglucoside granules, 29, 31
polyphosphate, 33-36
ribosomes, 36
vacuoles, 36-38
viruses, 38-39
of poxvirus, 366-67
Indole-3-acetic acid (IAA)
on cyanophyte growth, 59
Infection
abortive, 443-45
Infrared spectroscopy
to distinguish chitinous cell walls, 89
Insects
as vectors of trypanosomes, 110
Integration
in lysogeny, 451-88
Interdivision times
measurements and theories of, 524-27
Interferon
foot-and-mouth disease role of, 220-21
on SV40 T antigen, 444
and viral cell transformation, 402-3, 407
on viral messenger RNA, 382, 385
5-Iododeoxyuridine
on poxvirus multiplication, 384-85
on protein synthesis, 432
Iron
bacterial oxidation of ferrous ions, 498-99
in cyanphytes, 58
on nitrogen fixation, 52, 59
Isatin-β-thiosemicarbazone
inhibition of poxviruses by, 363, 381-82, 385
Isocitrate lyase
in cyanophytes, 52
Iso-citrate NADP dehydrogenase
in cyanophytes, 52

K

Kala azar

cause of, 109
Kanamycin
transferable drug resistance to, 141-42, 145, 147, 157, 162-63, 165
Kinetoplast
in trypanosomatids
-chondriome complex, 123-24
DNA of, 125-27
Klebsiella
transferable drug resistance in, 133, 160
Kloeckera africana
in winemaking, 325-26, 332
Kloeckera apiculata
in winemaking, 325-32, 335, 337
Kloeckera jensenii
in winemaking, 325, 330
Kloeckera magna
in winemaking, 331
Kojic acid
from Aspergillus, 273

L

Lactic acid bacteria
nutritional requirements of, 341
spoilage of wine by, 346-47
Lactic dehydrogenase
effect of cholera toxin on, 249
as genetic polymorphism, 296-97
Lactobacillus
in winemaking, 340
Lactobacillus brevis
in winemaking, 341
Lactobacillus buchneri
in winemaking, 341
Lactobacillus casei
in winemaking, 341
Lactobacillus delbrueckii
in winemaking, 341
Lactobacillus fermenti
in winemaking, 341
Lactobacillus hilgardii
in winemaking, 341
Lactobacillus leichmannii
in winemaking, 341
Lactobacillus pastorianus
in winemaking, 341
Lactobacillus plantarum
in winemaking, 341
Lactobacillus trichodes
in winemaking, 341
Lamellae
of cyanophytes
electron transport chain, 53
L chain
see Immunoglobulins
Leishmania
biochemistry of, 109
Leishmania enriettii
isolation of kinetoplasts from, 125-26
Leishmania tarentolae
culture of, 114-16
Leuconostoc citrovorum
in winemaking, 341
Leuconostoc dextranicum
in winemaking, 341
Leuconostoc gracile
in winemaking, 341
Leuconostoc mesenteroids
in winemaking, 341
Leuconostoc oenus
in winemaking, 341
Leuconostoc sp.
in winemaking, 340, 345
Leukemia virus, murine
RNA of, 319
Lichens
symbiosis in, 64
Light
and algal respiration, 54
on coccolith formation, 81-83
on coccolithophorid growth, 76
Lipids
as algal inclusions, 36
components of cyanophytes, 57
in fungal cell wall, 88-89
of vaccinia virion, 363
Livestock
foot-and-mouth disease of, 201-44
LPP-1 virus
description of, 38-39
discovery of, 38
photoreactivation of, 39
possible genetic role of, 25
Luteoskyrin
toxicity of, 276
Lymphocytes
and immune mechanisms, 290-91
and tolerance, 300
Lymphoid cells
antibody-forming potential of, 292
Lymphoid-macrophage system
concept of, 6
Lyngbya
chemical composition of, 58
fine structure of, 16
Lysogens
cryptic, 466, 478, 480-82
double, 468, 470, 472
Lysogeny, 451-88
attachment region, 475-84
dissection of, 479-84
lambda b2, 476-77
nonidentity of, 477-79
questions to be answered, 484
Campbell model of, 454-62
circularization, 455-57
diagram of, 454
evaluation of, 462
linear insertion, 458-59
recombination, 457-58
transducing phages, 459-62
conclusion, 484
definition of terminology, 452-54
physiology of integration, 463-75
control of functions of, 472-75
enzymology, 463
evidence for termination system, 470
excision, 469-70
integration-defective mutants, 463-65
other integration functions, 470-71
and replication, 471-72
site-specific recombination, 465-69
preface, 452
Lysozyme
on algal cell wall, 19-20
on algal sheath, 17

M

Macrophage
cytoplasmic bridge to lymphocytes from, 291
and immune mechanisms, 290-91
Magnesium
in blue-green algae, 58
Malaria
parasite-host relationship in, 5-8
precipitin test in, 8
Malate synthase
in cyanophytes, 52
Malic acid
yeast fermentation of, 338-39
Malic dehydrogenase
in cyanophytes, 52
Malo-lactic bacteria
deacidification of wine by, 343-44
Manganese
in cyanophytes, 58
on nitrogen fixation, 52, 59
Mannan
in fungal cell wall, 98-100
D-Mannose

in fungal cell wall, 89, 94-98
Mathematics of microbial populations, 519-48
commonly used frequency functions for, 522
frequency functions of age in steady-state, 530
generalized statistics of age, 537-39
generalized statistics of size, 544-47
interdivision times: measurements and theories, 524-27
introduction to, 519-20
kinetics of individual growth, 532-34
renewal equations, 539-44
samples and random variables, 520-22
statistics of age in steady-state, 527-32
statistics of size in steady-state, 534-37
steady-state, 522-24
Melampsora
cell wall of, 102
Merismopedia glauca
thylakoids of, 22
Metachromatic granules
in algal cells, 35
Methane
bacterial formation of, 503-4
Methobacterium omelianskii
hydrogen oxidation by, 503
N-Methyl isatin β thiosemicarbazone
virus inhibition by, 235
Mice
adaptation of foot-and-mouth disease virus to, 213, 215-16
Micrococcus
cytochromes of, 190
in winemaking, 339
Micrococcus denitrificans
carbon dioxide fixation by, 512
cytochromes of, 193, 195
hydrogen oxidation by, 502
Microcoleus
fine structure of, 19
Microcystis aeruginosa
toxin from, 61
Milk
aflatoxin in, 280
Milker's nodule virus
growth cycle of, 367
Molybdenum
in cyanophytes, 58
on nitrogen fixation, 52, 59
Monkeypox virus
growth cycle of, 366
Mucorales
cell wall of, 94, 102-4
Mucor rouxii
cell wall of, 89
chemistry of, 95, 100-4
Mycobacterium avium
cytochromes of, 193
Mycobacterium paratuberculosis
cytochromes of, 193
Mycobacterium phlei
cytochromes of, 193
Mycobacterium smegmatis
cytochromes of, 193
Mycobacterium tuberculosis
cytochromes of, 193
Myeloblastosis virus, avian
RNA of, 319
Myxococcus xanthus
cytochromes of, 193
polyphosphates in, 36
Myxoma virus
growth cycle of, 370-71
morphology of, 363-64
titration of, 365

N

Nadsonia elongata
cell wall structure of, 88
Neoantigens
see T antigens
Neomycin
bacterial resistance to, 162-63, 165
Neuraminic acid
in virus-transformed cell, 411
Neurospora
cell wall of, 89, 96-100, 102-3
Newcastle disease virus
RNA of, 318-19
Nippostrongylus brasiliensis
immunological studies of, 6
Nitrate
dissimilatory reduction of, 501-2
Nitrite
bacterial oxidation of, 491-93
Nitrobacter
carbon dioxide fixation by, 512
cytochromes of, 194
formate growth of, 504
NAD reduction in, 507-10
Nitrobacter agilis
cytochromes of, 193
oxidative phosphorylation in, 504, 506
Nitrobacter sp.
oxidation of nitrite by, 491-93
Nitrobacter winogradsky
cytochromes of, 193
Nitrogen
algal assimilation of, 50-52
cricosphaera utilization of, 76
cyanophyte sources of, 50, 58
fixation
mineral effects on, 52
Nitrogen mustard
on poxvirus, 370, 372
β-Nitropropionic acid
source of, 273
Nitrosocystis oceanus
ammonia oxidation by, 493-94
Nitrosocystis sp.
oxidation of ammonia by, 493-95
Nitrosomonas
NAD reduction in, 508-9
Nitrosomonas europaea
ammonia oxidation by, 493-94
carbon dioxide fixation by, 512
cytochromes of, 193
Nitrosomonas sp.
ammonia oxidation by, 493-95
Nitrous acid
mutagenic effects of, 385
on virus, 226
Nostoc
chemical composition of, 58
fine structure of, 16-17, 20-21, 27, 29, 33, 35
nitrogen fixation in, 51
survival of, 63
Nostoc muscorum
cell fusion in, 61
light-triggered growth response of, 60
resistant spores of, 40
Nostoc sphaericum
wall modification in, 20-21
Nucleases
of poxviruses, 375-76
Nucleic acids
aflatoxin binding of, 275
in blue-green algae, 55-57
hybridization of, 417-18
see also specific ones
Nucleoplasm
algal
histochemical techniques to study, 24

morphology and genetics of, 24-25
photomicrographs of, 30
Nutrition
algal mineral requirements, 58-59
of coccolithophorids, 75-77

O

Oats
victoria blight disease of, 277
Ochrosphaera neapolitana
for culture studies, 71-73
Oomycetes
cell wall of, 91, 93
Oriental sore
cause of, 109
Oscillatoria agardhii
fine structure of, 38
Oscillatoria amoena
fine structure of, 17, 29
Oscillatoria chalybea
fine structure of, 22, 29, 31, 41
Oscillatoria limosa
fine structure of, 19
Oscillatoria princeps
fine structure of, 29
possible virus in, 39
Oscillatoria rebescens
fine structure of, 18, 21-22, 27, 33
Oscillatoria sp.
auxin activity in, 59
Oxygen
light effects on algal uptake of, 54
trypanosome metabolism of, 121-22

P

Papillomas
arginase levels in, 436-37
Papilloma virus
cellular transformation by, 393
in rabbits
arginase levels in, 405
in vitro transformation by, 393-94, 398-99, 405-6, 409, 412, 414-15
Papovavirus
on cellular RNA synthesis, 430-31
cellular transformation by, 393
enzymes for protein synthesis by, 435-38
synthesis of structural proteins of, 438-39
Parasite-host relationships
vertebrate, 4-5
Paravaccinia viruses
morphology of, 364
Pasteurella tularensis
cytochromes of, 194
Pediococci
new key to, 341
in winemaking, 340
Pediococcus cerevisiae
in winemaking, 341
Penicillin
bacterial resistance to, 132, 140, 148, 172
Penicillium
cell wall of, 89, 96
Penicillium citrinum
toxin from, 274
Penicillium frequentans
toxin from, 274
Penicillium islandicum
toxins from, 276, 280
Penicillium puberulum
toxin from, 274
Penicillium rubrum
toxins from, 276-77
Penicillium sp.
toxins from, 276-77
in winemaking, 332
Penicillium variable
toxin from, 274
Periconia circinata
toxin from, 279-80
Phormidium persicinum
vitamin requirement for, 59
Phormidium retzii
vacuoles of, 37
Phormidium uncinatum
chemical composition of, 58
fine structure of, 16-17, 20
Phosphoglucomutase
genetics of formation of, 297
Phosphoribulokinase
in carbon dioxide fixation, 512
Phosphorus
in blue-green algae, 58
Phosphorylation
oxidative
bacterial, 504-7
substrate
APS pathway, 510-12
Photoautotrophy
of Haptophyceae, 76
obligate
in cyanophytes, 54-55
Photosynthesis
and coccolith formation, 81-82
in cyanophytes, 48-50
carboxylation reactions, 50
fine structure of apparatus for, 21-24
mechanisms of, 48-49
pigments, 49-50, 58
Phycobilin
algal site of, 23
synthesis of, 58
Phycocyanin
in blue-green algae, 58
Phycoerythrin
in blue-green algae, 58
Phycomycetes
cell wall of, 102
Phytophthora cinnamomi
cell wall of, 103
Pichia alcoholophila
in winemaking, 335
Pichia farinosa
cell wall of, 104
Pichia fermentans
in winemaking, 325, 330-32
Pichia membranaefaciens
in winemaking, 325-27, 331-32, 335
Pichia sp.
in winemaking, 334-35
Picornaviruses
coat proteins of, 307, 318
Pithomyces
cell wall of, 96, 101
Pithomyces chartarum
toxins for, 270-73
Planaria maculata
reactions of eye spots of, 2
Plasmalemma
algal
morphology and fine structure of, 20
photomicrograph of, 27
Plasmodesmata
see Plasmalemma
Plasmodesmata
usage of, 19
Plasmodium falciparum
sickling phenomena in, 2
Plastocyanin
in cyanophyte photosynthesis, 49
Plastoquinone
in cyanophyte photosynthesis, 49
Plectonema boryanum
chemical composition of, 58
DNA of, 56
photomicrograph of viral particles in, 32
viral lysis of, 63
Pleurochrysis scherffelii
in Plymouth Culture Collection, 72
Plymouth Culture Collection, 72
coccolithophorids in, 72
Poliovirus

coat proteins of, 307
Polygalactosamine
in fungal cell wall, 99
Polyglucoside
as algal cell inclusion, 29, 31
Polyguanylic acid polymerase
in infected cells, 316-17
Polymyxin B
on blue-green algae, 42
Polynucleotide ligase
in vitro role of, 463
Polyoma virus
DNA synthesis in cells infected with, 440-42
in vitro transformation by, 393-96, 399-403, 405-18
specific RNA for, 431
Polyphosphate
in algal cells, 33-36
Polysaccharides
in cyanophytes, 57-58
in fungal cell walls, 89
Polythionate
pathway of formation of, 497
Porphyridium cruentum
fine structure of, 23
Porphyrins
structural and biosynthetic aspects of, 181
Potassium
in blue-green algae, 58
Poxviruses, 359-90
growth cycle of, 365-71
and cell proliferation, 370-71
cytopathic effects, 366
electron microscopic observations of, 367
genetics, 367-69
in intact animal, 371
kinetics of multiplication, 365-66
other rescue phenomena, 369-70
reactivation, 369
titration of virus, 365
viral inclusions or factories, 366-67
introduction to, 360
main groups of, 360-61
molecular biology of multiplication of, 371-85
DNA replication, 373-74
effect of infection on host, 383
enzymes, 374-76
inhibitors of multiplication, 384-85
maturation, 382-83
structural viral protein, 376-79
synthesis of virus-coded proteins, 374
uncoated, 372-73
vaccinia mRNA, 379-82
smallpox vaccination, 385-86
virion morphology of, 360-65
myxoma and birdpoxvirus groups, 363-64
paravaccinia, 364
poxvirus hemagglutinin, 364
serological relationships, 364-65
vaccinia, 361-63
yaba monkey tumor virus, 364
Procholeragen A
see Choleragen
beta-Propiolactone
inactivation of foot-and-mouth disease virus by, 226
Protein
in fungal cell wall, 88
physical and chemical properties of, 229
Protein disulfide reductase
on fungal cell wall, 101-2
Proteins
of vaccinia virion, 362-63
Protein synthesis
virus-coded, 374-79
early enzymes in, 374-76
structural viral protein, 376-79
in virus-infected cells, 383, 431-40
antigenically distinguishable proteins, 433
arginine in, 439-40
enzymology of, 434-38
rate of, 431
site of, 432-33
viral structural proteins, 438-39
virus effects on, 383
Proteus
transferable drug resistance in, 133, 144-46, 160, 175
Proteus vulgaris
hydrogen oxidation by, 500
Protozoan-bacterium complexes
review of, 120
Pseudomonas
in winemaking, 339, 346
Pseudomonas aeruginosa
cytochromes of, 187, 194-95
Pseudomonas denitrificans
cytochromes of, 185
Pseudomonas fluorescens
cytochromes of, 187
Pseudomonas oxaliticus
carbon dioxide fixation by, 512
formate oxidation by, 504
Pseudomonas putida
cytochromes of, 190
Pseudomonas riboflavina
cytochromes of, 193
Pseudomonas saccharophila
hydrogenase activity of, 500
Pseudorabies
DNAs of, 395
on DNA synthesis, 405
protein synthesis in, 431, 433-34, 439
thymidine kinase coding in, 405
Pullaria pullalans
cell wall of, 89, 100
Puromycin
on poxvirus multiplication, 384
Pyridine nucleotide (NAD)
ATP-dependent reduction, 502, 507-10
properties of systems catalyzing, 509
intermediate in oxidative phosphorylation, 506-7
Pyridine nucleotide oxidase, reduced
in apochlorotic blue-green algae, 53
Pythium ultimum
hyphal morphogenesis, 103

Q

Quarantine
in foot-and-mouth disease control, 209
Quinine
chemotherapeutic effects of, 7

R

Rabbit
adult
to study cholera toxins, 251-55, 261-62
infant
to study cholera toxins, 250-51, 261
Rabbitpox virus
growth cycle of, 368-70
titration of, 365
Radiation
on blue-green algae, 42
Recombination
site-specificity of, 465-89

attachment, 467
attachment loci merodiploid, 465-66
chromosomal mobilization, 467
cryptic lysogen, 466
of different attachment regions, 481
double lysogens, 468
special case of λ, 82, and 434, 468
superinfection curing, 467
transducing phages, 466-67
vegetative, 465
Replication
of phage DNA, 471-72
see also Deoxyribonucleic acid; Ribonucleic acid; and Viruses
Resistance
biochemical mechanism of, 146-48
transferable drug
in enterobacteria, 131-76
Resistance factor (R factor)
and cell replication, 141-42
chemical composition of, 144-46
compatibility of transfer factors, 146
specificity of determinants and transfer factors, 146
levels of resistance conferred by, 148
loss of transferability of, 142
origin and population effects of, 166-69
stability of, 142-44
in vitro, 142-43
in vivo, 143-44
structure of, 138-39
Respiration
in blue-green algae, 52-54
in trypanosomes, 115, 121-23
Rettgerella
transferable drug resistance in, 160
R factor
see Resistance factor
Rhinotracheitis virus, bovine
abortive infection of, 444
and protein synthesis, 431
Rhizobium japonicum
cytochromes of, 190
Rhizoctonia
cell wall of, 89, 96
Rhizopus
cell wall of, 102
Rhodomicrobium vannielii
cytochromes of, 183
Rhodopseudomonas capsulatus
cytochromes of, 183
Rhodopseudomonas gelatinosa
cytochromes of, 183, 185
Rhodopseudomonas molischianum
cytochromes of, 183, 185, 187
Rhodopseudomonas NHTC 133
cytochromes of, 183
Rhodopseudomonas palustris
cytochromes of, 183, 185
Rhodopseudomonas spheroides
cytochromes of, 183, 190-91, 193
Rhodospirillum Heme Protein
see Cytochromes c, c'
Rhodospirillum rubrum
cytochromes of, 183-86, 191, 193
photosynthetic apparatus of, 23
Rhodotorula
cell wall of, 98-99
Rhodotorulaceae
cell wall of, 91
Rhodotorula glutinus
in winemaking, 330-31
Rhodotorula minuta
in winemaking, 332
Rhodotorula mucilaginosa
in winemaking, 325, 330, 332
Ribonuclease (RNase)
interference with immune response by, 291
in poxviruses, 361
Ribonucleic acid (RNA)
culture of
in foot-and-mouth disease virus, 217-18
in cyanophytes, 56-57
double-stranded replicative form of, 309-10, 313
in foot-and-mouth disease virus, 232-35
forms of virus-specific, 313
molecular structure of, 306-7
phages, 307-8
physical and chemical properties of, 229
post-immunization changes in, 299
replicative intermediate of, 310-15
purification of, 313-15
structures of, 311
role in immune mechanisms, 290-92
synthesis of
in poxvirus, 373-76
in virus-infected cells, 428-31
types of molecules of, 428
virus-specific, 308-13
see also Viruses, RNA
Ribonucleic acid, messenger (mRNA)
of vaccinia virus
control and translation of, 379-82
virus-specific
in transformed and tumor cells, 431
Ribonucleic acid polymerase
in foot-and-mouth disease virus
function of, 233-34
in poxviruses, 361
viral RNA-dependent, 315-18
Ribosomes
in algal cells, 36
Rous sarcoma virus
on host cells, 409, 411
Rubratoxins
characterization of, 276-77

S

Saccharomyces
interdivision times of, 526
Saccharomyces acidificiens
in winemaking, 325-27, 331, 335
Saccharomyces bailii
in winemaking, 337
Saccharomyces bayanus
in winemaking, 325-26
Saccharomyces beticus
in winemaking, 329, 333-34
Saccharomyces bisporus
in winemaking, 325
Saccharomyces capensis
in winemaking, 331
Saccharomyces carlsbergensis
cell wall of, 104
in winemaking, 325-27, 332-33, 336
Saccharomyces cerevisiae
cell wall of, 89, 100, 102, 104
Saccharomyces cerevisiae
var. ellipsoideus
in winemaking, 325-33, 335-38
Saccharomyces cheresiensis
in winemaking, 329, 333-34
Saccharomyces chevalieri
in winemaking, 325-27, 330-32, 335
Saccharomyces coreanus
in winemaking, 326-27
Saccharomyces delbrueckii

in winemaking, 325, 330, 333
Saccharomyces elegans
in winemaking, 325-26, 329, 331-32, 335
Saccharomyces elipsoidius
interdivision times of, 525
Saccharomyces eupagicus
in winemaking, 337
Saccharomyces exiguus
in winemaking, 325-26, 329-30
Saccharomyces fermentati
in winemaking, 330, 333
Saccharomyces florentinus
in winemaking, 325, 330-31
Saccharomyces fructuum
in winemaking, 325, 327, 330-32
Saccharomyces heterogenicus
in winemaking, 325
Saccharomyces italicus
in winemaking, 325-26, 328, 330-31, 333, 335
Saccharomyces kluyveri
in winemaking, 330
Saccharomyces mangini
in winemaking, 329, 333
Saccharomyces mellis
in winemaking, 329, 332
Saccharomyces microellipsoideus
in winemaking, 330
Saccharomyces montuliensis
in winemaking, 333
Saccharomyces octosporus
in winemaking, 339
Saccharomyces oviformis
in winemaking, 325-38
Saccharomyces pastorianus
in winemaking, 325-28, 330, 335
Saccharomyces prostoserdovi
in winemaking, 335
Saccharomyces rosei
in winemaking, 325-31, 336-38
Saccharomyces rouxii
in winemaking, 329, 333, 335
Saccharomyces steineri
in winemaking, 325, 327-28, 330
Saccharomyces transvalensis
in winemaking, 330
Saccharomyces uvarum
in winemaking, 325, 327-28
Saccharomyces vanudenii
in winemaking, 331, 335
Saccharomyces veronae
in winemaking, 325-26, 329-31, 334
Saccharomyces willianus
in winemaking, 325-26
Saccharomycetaceae
cell wall of, 91
Saccharomycodes ludwigii
in winemaking, 325, 327-28, 331, 333
Saccharomycopsis guttulata
cell wall of, 88
Salivarian trypanosomes
classification of, 111
in vitro culture of, 113-14
Salmonellae
transferable drug resistance in, 133-38, 142-44, 146-48, 151, 155-73, 175-76
Salmonella panama
phage restriction by R factors in, 156, 168
Salmonella parahyphi
phage restriction by, 156-57
Salmonella typhi
transferable drug resistance of, 135-37, 139, 156-57, 171-72
Salmonella typhimurium
growth rate of, 533
phage type 29
transferable drug resistance of, 134, 163, 165, 168-71
phage type 36
transferable drug resistance of, 135
rise of drug resistance in, 161-66
Sarcina lutea
cytochromes of, 193
Schizophyllum
cell wall of, 96, 102-3
Schizosaccharomyces
cell wall of, 96
growth of, 533
Schizosaccharomyces pombe
in winemaking, 328, 338-39
Sclerotium
cell wall of, 96
Sendai virus (Parainfluenza type 1)
cell fusion studies with, 418-19
Serratia marcescens
transferable drug resistance in, 145-46
Sex fimbriae
definition, synthesis and function of, 153-55
Sheath
algal
photograph of, 27
Sheep
foot-and-mouth disease, 203
sporidesmin poisoning of, 271-72
Sheeppox virus
growth cycle of, 367
Shigellae
transferable drug resistance in, 132-33, 144, 148, 159-60, 175
Shwartzman phenomenon
cholera toxin, 256
Skujapelta nuda
wall modification in, 20
Sleeping sickness
cause of, 109
SM-1 virus
discovery of, 39
Smallpox (variola)
growth cycle of, 367-69, 371
titration of, 365
vaccination for, 385-86
Sodium
in blue-green algae, 58
inhibition of transport of by cholera toxin, 258-59
and nitrogen fixation, 52
Sorbic acid
stabilization of wine by, 349
Sorghum
milo disease of, 279-80
Sphaerulina intermixta
in winemaking, 332
Spirulina platensis
fatty acids of, 57
Spleen
immunological role of, 7
Spores
germination of, 102-3
Sporidesmin
toxic effects of, 270-73
chemistry of, 270-72
on enzyme systems, 272
field control of, 273
protection against, 273
Sporobolomycetaceae
cell wall of, 91, 98-99
Sporogenesis
in fungal cell wall, 101
Staphylococcus albus
cytochromes of, 191
Staphylococcus aureus
cytochromes of, 189, 193
Staphylococcus epidermidis
cytochromes of, 193
Statistics
age in steady-state, 527-32
generalized, 537-39
size in steady-state, 534-37
generalized, 544-47
Stercorarian trypanosomes
classification of, 110-11
in vitro culture of, 112-13
Streptobacterium

in winemaking, 340
Streptococcus faecalis
growth rate of, 533
Streptomycin
bacterial resistance to, 132, 134, 137-40, 142-48, 151-52, 161-63, 165-67, 169
Succinic dehydrogenase
in cyanophytes, 52
Sulfate
dissimilatory reduction of, 502-3
Sulfur
in blue-green algae, 58
inorganic compounds of
bacterial oxidation of, 495-98
pathway of oxidation of, 497
Sulfur dioxide
in winemaking, 342, 348-49
Sulphonamides
bacterial resistance to, 132, 134, 137-46, 152, 161-63, 165-67, 169
SV40 virus
DNA synthesis in cells infected with, 442-43, 445
in vitro transformation by, 393-407, 409-20
metabolism of cells infected with, 433, 435-36, 438-40
Swine
foot-and-mouth disease, 201-44
Symbiosis
with blue-green algae, 64-65
modification in structure from, 20
Symploca muscorum
fine structure of, 18, 27, 29
Synechococcus
enzyme resistance of, 19
Syracosphaera sp.
in Plymouth Culture Collection, 72

T

T antigen (tumor antigen)
induction of, 401-3
infected cell synthesis of, 431, 442
protein properties of, 402
Taxonomy
of fungi, 90-99
of trypanosomatids, 110-12
Temperature
coccolithophorid tolerance of, 75
extremes of
blue-green algal tolerance of, 62-63
Tetracycline
bacterial resistance to, 132, 134, 136-40, 142-45, 149, 156, 158, 161-63, 165, 168-70, 172-73
Tetrahymena
interdivision times of, 526
Tetrahymena pyriformis
degradation of aflatoxin by, 276
growth rate of, 533
Thermobacterium
in winemaking, 340
Thiabendazole
fungicidal effects of, 273
Thiamine
coccolithophorid requirement for, 77
Thiobacillus
oxidative phosphorylation in, 504-6
Thiobacillus denitrificans
carbon dioxide fixation by, 512
substrate phosphorylation by, 150
sulfur oxidation by, 496
Thiobacillus intermedius
growth stimulation in, 514
Thiobacillus neapolitanos
substrate phosphorylation in, 511
Thiobacillus novellus
carbon dioxide fixation in, 513
cytochromes of, 193
NAD reduction in, 508-9
substrate phosphorylation of, 510-11
Thiobacillus sp.
oxidation of ferrous ions by, 498
oxidation of inorganic sulfur compounds by, 495-98
Thiobacillus thiooxidans
carbon dioxide fixation by, 512
substrate phosphorylation, 510-11
tricarboxylic acid cycle in, 514
Thiobacillus thioparus
carbon dioxide fixation in, 512
substrate phosphorylation in, 510
sulfur oxidation by, 495
tricarboxylic acid cycle in, 514
Thiorhodaceae
substrate phosphorylation, 511
sulfur oxidation by, 496
Thylakoids
photosynthetic
composition of, 22-23
evolutionary implications of, 24
morphology of, 21-22
nitrogen fixation by, 23
origin of, 22
other functions of, 23-24
photomicrograph of, 28
Thymidine kinase
in poxviruses, 375-76, 385
properties in transformed cells, 404-5
viral induction of, 403-5
in virus-infected cell, 434-38
Thymidine monophosphate kinase
in virus-infected cell, 434-36
Thymidine monophosphate synthetase
in virus-infected cell, 434-36
Ticks
as foot-and-mouth disease vectors, 206
Tissue culture
on foot-and-mouth disease virus, 217-18
of trypanosomatid flagellates, 112-15
α-Tocopherolquinone
in cyanophyte photosynthesis, 49
Tolerance
"forbidden clone" concept of, 287
induction and breaking of, 300
and lymphocytes, 300
Tolypothrix tenuis
chemical composition of, 57
dark growth of, 54
fine structure of, 17-18
Torulopsis bacillaris
in winemaking, 325-27, 330-31
Torulopsis burgeffiana
in winemaking, 331
Torulopsis cantarelli
in winemaking, 331, 335
Torulopsis capsuligenus
in winemaking, 335
Torulopsis domercqii
in winemaking, 331, 335
Torulopsis famata
in winemaking, 325, 332
Torulopsis glabrata
in winemaking, 326, 331

Torulopsis inconspicua
in winemaking, 326
Torulopsis osmophila
in winemaking, 335
Torulopsis stellata
in winemaking, 326, 331
Torulopsis vanzylii
in winemaking, 335
Torulopsis versatilis
in winemaking, 326-27
Toxins
of blue-green algae, 61-62
fungal, 269-82
see also Cholera toxins
Transfer factors
of drug resistance
nature and potentialities of, 174-76
Transformation
cellular
definition of, 392
Transplantation rejection antigen
in virus-infected cell, 415-16, 418
Tricarboxylic acid cycle
in autotrophic biosynthesis, 513-14
in cyanophyte physiology, 52, 55
in trypanosomes, 121
Trichodesmium
nitrogen fixation in, 50
Trichomycetes
cell wall of, 91, 99
Trichophyton
cell wall of, 96
Trichosporon behrendi
in winemaking, 330
Trichosporon hellenicum
in winemaking, 330, 335
Trichosporon pullalans
in winemaking, 332
Trifluorothymidine
to study enzyme inhibition, 404
Trigonopsis variabilis
in winemaking, 332
Trypanosoma
subdivision of, 110-12
Trypanosoma brucei
biochemistry of, 111
culture of, 113-14
pleomorphism in, 120-27
kinetoplast-chondriome complex, 123-24
kinetoplast DNA, 125-27
morphological changes, 120-21
respiratory metabolism, 121-23
schemata of chondriome development in different forms of, 123
Trypanosoma congolense
classification of, 111
culture of, 113
Trypanosoma conorhini
culture of, 113
Trypanosoma cruzi
biochemistry of, 112
classification of, 110
Trypanosoma gambiense
classification of, 111
culture of, 113
Trypanosoma lewisi
biochemistry of, 112
classification of, 110
size of, 3
Trypanosoma mega
culture of, 114
Trypanosoma melophagium
classification of, 111
Trypanosoma ranarum
culture of, 114
Trypanosoma rhodesiense
classification of, 111
culture of, 113
Trypanosoma theileri
classification of, 111
culture of, 113
Trypanosomatids
biochemistry of, 109-30
bipolar body of Crithidia oncopelti, 117-20
definitions and classification, 110-12
introduction to, 109-10
nutritional requirements, 115-17
pleomorphism in brucei, 120-27
problems of in vitro culture of, 112-15
genera and developmental stages of, 111
Trypanosoma vivax
biochemistry of, 111-12
Trypanosomiases
parasite-host relationship in, 5
Tsetse fly
trypanosome life cycle in, 120
Tumor antigen
see T antigen
Tumor viruses
see Viruses, oncogenic DNA; also specific ones
Typhoid fever
chloramphenicol treatment of, 171-72

U

Ultraviolet radiation
cyanophyte tolerance to, 56
of foot-and-mouth virus, 226
of poxviruses, 370, 372, 376, 383
Uncoating
of poxviruses, 372-73
Uridine-diphospho-glucose (UDPG)
in fungal cell wall, 103
Uronic acids
in fungal walls, 89

V

Vaccination
in foot-and-mouth disease control, 209-10
for smallpox, 385-86
Vaccines
foot-and-mouth disease, 210-13
smallpox
contamination of, 386
Vaccinia virus
DNAs of, 395
DNA synthesis, 405, 409
enzymology of, 437
growth cycle of, 366-68, 370
molecular biology of, 372, 374
mRNA of
control of transcription and translation of, 379-82
purification methods for, 362
thymidine kinase coding in, 405
titration of, 365
virion of, 361-63
composition of, 361-62
DNA of, 362
proteins and lipids of, 362-63
structure of, 361
Vacuoles
in algal cells, 33, 36-38
membrane composition, 38
volume of, 38
Vanadium
cyanophyte requirements of, 59
Variola
see Smallpox
Venturia
cell wall of, 96, 103
Vibrio
toxigenicity of strains of, 250
Vibrio cholerae
El Tor types of, 246, 259-60, 262
toxins from, 245-68
Victorin
biochemical effects of

poisoning with, 278-79
source and chemistry of, 277-78
Victoxinine
isolation of, 278
Vinegar
bacterial souring of, 345
Vi-phage II
restriction of, 156
Virion
poxvirus, 360-65
myxoma and birdpoxvirus, 363-64
vaccinia, 361-63
Viruses
in algal cells, 33, 38-39
criteria for definition of, 174
foot-and-mouth disease, 201-44
absorbance-temperature curves for, 223
antigens and antibodies, 235-37
biochemistry of, 221-37
biosynthetic cycle, 231-35
chemical and physical parameters of, 228-29
chemical and physical reactivity, 221-27
classification of, 235
electron micrographs of, 230
purification method, 228
sensitivity to pH, 221-22
structure of virus, 227-31
virus-host experiments, 215-20
pox
see Poxviruses
susceptibility of blue-green algae to, 63-64
uncoating of, 272-73
Viruses, nuclear DNA
metabolism of cells infected with, 427-50
abortive infection, 443-45
conclusion, 445-46
DNA synthesis, 440-43
introduction to, 427-28
protein synthesis, 431-40
RNA synthesis, 428-31
role of arginine in, 439-40
size-grouping of, 428
Viruses, oncogenic DNA
characteristics of transformed cell, 409-14
autonomy of transformed cell, 413-14
cytogenetics, 411-13
loss of contact inhibition, 410-11
morphology, 409-10
homology with mammalian cell DNA, 394-95
introduction to, 391-95
in vitro transformation studies of, 391-426
adenovirus, 397-98
adenovirus-SV40 hybrid, 398
general aspects of, 395
papilloma, 398-99
polyoma, 395-96
quantitative aspects of, 399-400
summary of biological studies, 400-1
SV40, 396-97
mechanism of transformation, 401-9
conclusions, 408-9
derepression of DNA synthesis, 405-7
fixation of viral genome, 407-8
induction of enzymes, 403-5
induction of T antigen, 401-3
persistence of viral genome in transformed cell, 414-20
comparisons with lysogenic bacteria, 419-20
nucleic acid hybridization, 417-18
transplantation rejection antigen, 415-16
virogenic state of SV40-transformed cells, 418-19
virus-specific tumor antigens, 416-17
specificity of RNA for, 430-31
Viruses, RNA
replication of, 305-22
current status of, 318-19
introduction to, 305-6
in vitro synthesis of viral RNA, 315-18
purification and properties of replicative intermediate RNA, 313-15
virus-specific RNA in infected cells, 308-13
structure of, 306-8
coat proteins and other virus-specific proteins, 307
RNA molecule, 306-7
RNA phages, 307-8
Vitamin B_{12}
coccolithophorid requirement for, 77
in cyanophytes, 59
Vitamin K_1
in cyanophyte photosynthesis, 49
Vitamins
in blue-green algae, 59
coccolithophorid requirements of, 77
Volutin
in algal cells, 35, 37

W

Winemaking, 323-58
bacteria in, 339-47
control of malo-lactic fermentation, 344-45
deacidification by malo-lactic bacteria, 343-44
lactic acid and malo-lactic fermentation, 340-43
wine spoilage, 345-47
and yeast interactions, 347
previous reviews of, 323-24
stabilization of semidry wine, 347-50
chemical additives, 348-50
filtration, 348
vinegar souring in, 345
yeasts in, 324-39
distribution in wineries, 335-36
fermentation of malic acid, 338-39
natural flora of grapes, musts and wines, 324-33
new species, 334-35
pure versus mixed cultures, 336-38
sherry film, 333-34
spoilage yeasts, 336

X

Xenopus laevis
DNA of, 126
X ray
modification of hemolysin response by, 11-12
X-ray diffraction
to study cell wall polymers, 89, 96
Xylose
in fungal cell wall, 89

Y

Yaba monkey tumor virus
growth cycle of, 366-67, 370
titration of, 365
virion morphology of, 364
Yeasts

bees and wasps as vectors of, 332
cell walls of, 88
nomenclature of, 324
in winemaking, 324-39
distribution of in wineries, 335-36
fermentation of malic acid, 338-39
interacting with bacteria, 347
natural flora of grapes, musts, and wines, 324-33
new species, 334-35
pure versus mixed cultures, 336-38
sherry film yeasts, 333-34
spoilage yeasts, 336
see also specific ones

Z

Zinc
in cyanophytes, 58
Zygomycetes
cell wall of, 91, 94